# University of New Mexico UNM Digital Repository

Psychology ETDs

**Electronic Theses and Dissertations** 

9-12-2014

# Consequences and Protective Factors for Sexual Victimization Among Ethnically Diverse Women: An Online Study

Rosa Muñoz

Follow this and additional works at: https://digitalrepository.unm.edu/psy etds

#### Recommended Citation

 $Mu\~noz, Rosa. "Consequences and Protective Factors for Sexual Victimization Among Ethnically Diverse Women: An Online Study." (2014). https://digitalrepository.unm.edu/psy_etds/103$ 

This Thesis is brought to you for free and open access by the Electronic Theses and Dissertations at UNM Digital Repository. It has been accepted for inclusion in Psychology ETDs by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.



Rosa Muñoz
Candidate
Psychology
Department Department
This thesis is approved, and it is acceptable in quality and form for publication:
Approved by the Thesis Committee:
Elizabeth Yeater , Chairperson
Steven Verney
Kamilla Venner



# CONSEQUENCES AND PROTECTIVE FACTORS FOR SEXUAL VICTIMIZATION AMONG ETHNICALLY DIVERSE WOMEN: AN ONLINE STUDY

by

# ROSA E. MUÑOZ

B.A. PSYCHOLOGY, 1998-2003 UNIVERSITY OF NEW MEXICO

#### **THESIS**

Submitted in Partial Fulfillment of the Requirements for the Degree of

Masters of Science Psychology

The University of New Mexico Albuquerque, New Mexico

**JULY 2014** 



# **DEDICATION**

To my best pal in the entire world, LolaBear.



#### ACKNOWLEDGMENTS

I would like to thank my committee chair, Elizabeth Yeater, for her support, coaching, and unflagging encouragement in this process. Her consistent efforts with this project have shaped me as a researcher and have deepened my understanding of complex ideas, and I am a better researcher for it. I would also like to thank my committee members, Steven Verney and Kamilla Venner, for their support and inspiration and for all that they do to reduce health disparities among underserved and underrepresented populations. I would also like to thank Kari A. Leiting, Jennifer N. Crawford, and Kylee J. Hagler for their constant encouragement, statistical consultation, friendship and support. Finally, to my partner, Derrick J. Sanders—thanks for all the snacks, love, and laughter throughout this entire process. This is as much yours as it is mine.



# CONSEQUENCES AND PROTECTIVE FACTORS FOR SEXUAL VICTIMIZATION AMONG ETHNICALLY DIVERSE WOMEN: AN ONLINE STUDY

by

#### Rosa Muñoz

B.A., Psychology, University of New Mexico, 2003M.S., Psychology, University of New Mexico, 2014

#### **ABSTRACT**

This study examined the relationships among ethnicity, childhood abuse, adult sexual victimization, negative outcomes of victimization, and factors that protect women against negative outcomes after experiencing these events. Three hundred and fifty four women (n=354) from New Mexico completed an online survey asking them about their victimization history, ethnic identity, religious beliefs, and perceptions of their physical and mental health. Multiple regression analyses were used to examine the relationships among variables. Hispanic and non-Hispanic white women did not report differential negative outcomes subsequent to trauma history and did not employ differential coping strategies in response to such a history. Higher posttraumatic growth was shown to moderate the influence of adult/adolescent sexual victimization on negative outcomes for both Hispanic and non-Hispanic white women. Religiosity was not found to be a protective factor for either Hispanic or non-Hispanic women. Acculturation had a mixed influence among Hispanic women, with perceived discrimination predicting worsened



outcomes and low mainstream comfort predicting improved outcomes, subsequent to trauma history. These results suggest that further research should address the role of posttraumatic growth in women of differing ethnicities and that acculturation may play a complicated role in moderating negative outcomes after victimization.



# TABLE OF CONTENTS

LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1 INTRODUCTION	1
CHAPTER 2 METHODS	14
CHAPTER 3 RESULTS	24
CHAPTER 4 DISCUSSION	49
APPENDIX A	60
APPENDIX B	85
APPENDIX C	87
APPENDIX D	119
DEEEDENCEC	126

# LIST OF FIGURES

Figure 1. The relationship between trauma symptomatology and physical abuse in
Hispanic women, moderated by perceived discrimination120
Figure 2. The relationship between trauma symptoms and childhood physical abuse in
Hispanic women, moderated by mainstream comfort121
Figure 3. The relationship between somatic complaints and childhood physical abuse in
Hispanic women, moderated by perceived discrimination
Figure 4. The relationship between somatic complaints and adult/adolescent sexual
victimization in Hispanic women, moderated by mainstream comfort123
Figure 5. The relationship between somatic complaints and childhood emotional abuse in
Hispanic women, moderated by mainstream comfort124
Figure 6. The relationship between somatic complaints and childhood physical abuse in
Hispanic women, moderated by mainstream comfort125
Figure 7. The relationship between general psychological distress and childhood physical
abuse in Hispanic women, moderated by perceived discrimination126
Figure 8. The relationship between general psychological distress and childhood physical
abuse in Hispanic women, moderated by mainstream comfort
Figure 9. The relationship between somatic complaints and childhood sexual abuse in
Hispanic women, moderated by religious practices and beliefs128
Figure 10. The relationship between physical health and childhood emotional abuse in
non-Hispanic white women, moderated by religiosity129
Figure 11. The relationship between somatic complaints and childhood physical abuse in
non-Hispanic white women, moderated by religiosity130
Figure 12. The relationship between trauma symptomatology and adult/adolescent sexual
victimization in Hispanic women, as moderated by posttraumatic growth131
Figure 13. The relationship between trauma symptomatology and adult/adolescent sexual
victimization in non-Hispanic white women as moderated by posttraumatic growth132
Figure 14. The relationship between physical health and adult/adolescent sexual
victimization in non-Hispanic white women, moderated by posttraumatic growth133
Figure 15. The relationship between general psychological distress and adult/adolescent
sexual victimization in Hispanic women as moderated by posttraumatic growth134
Figure 16. The relationship between general psychological distress and childhood
emotional abuse in Hispanic women, moderated by active coping135



### LIST OF TABLES

Table 1. Demographic Information	.88
Table 2. Severity of Adult/Adolescent Sexual Victimization among Hispanic and Non-	
Hispanic White Women	.89
Table 3. Intercorrelations Between Measures	.90
Table 4. Trauma Symptoms in Hispanic and Non-Hispanic White Women as a Function	
of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization	.94
Table 5. Physical Health Symptoms in Hispanic and Non-Hispanic White Women as a	
Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual	
Victimization	.95
Table 6. General Psychological Distress in Hispanic and Non-Hispanic White Women as	
a Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual	
Victimization	.96
Table 7. Alcohol Use in Hispanic and Non-Hispanic White Women as a Function of	
Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization	.97
Table 8. The Influence of Acculturation on the Relationship Between Trauma	
Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic	
and Non-Hispanic White Women	.98
Table 9. The Influence of Acculturation on the Relationship between Physical Health	
and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic	;
	.99
Table 10. The Influence of Acculturation on the Relationship between General	
Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in	
Hispanic and Non-Hispanic White Women	.100
Table 11. The Influence of Acculturation on the Relationship between Alcohol Use and	
Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic	
White Women	.101
Table 12. The Influence of Religiosity on the Relationship Between Trauma	
Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic	
and Non-Hispanic White Women	
Table 13. The Influence of Religiosity on the Relationship Between Somatic Complaints	
and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic	;
White Women	.103
Table 14. The Influence of Religiosity on the Relationship Between General	
Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in	
1	.104
Table 15. The Influence of Religiosity on the Relationship Between Alcohol Use and	
Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic	
	.105
Table 16. The Influence of Posttraumatic Growth on the Relationship Between Trauma	
Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic	
and Non-Hispanic White Women	.106



Table 17. The Influence of Posttraumatic Growth on the Relationship Between Physical	
Health and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-	
Hispanic White Women1	107
Table 18. The Influence of Posttraumatic Growth on the Relationship Between General	
Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in	
Hispanic and Non-Hispanic White Women1	108
Table 19. The Influence of Posttraumatic Growth on the Relationship Between Alcohol	
Use and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-	
Hispanic White Women1	109
Table 20. Active Coping as a Function of Childhood Abuse and Adolescent/Adult	
Victimization in Hispanic and Non-Hispanic White Women1	110
Table 21. Coping Through Planning as a Function of Childhood Abuse and	
Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women1	111
Table 22. Coping with Humor as a Function of Childhood Abuse and Adolescent/Adult	
Victimization in Hispanic and Non-Hispanic White Women1	112
Table 23. Coping Through Acceptance as a Function of Childhood Abuse and	
Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women1	113
Table 24. Coping Through Positive Reframing as a Function of Childhood Abuse and	
Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women1	114
Table 25. The Influence of Active Coping on the Relationship Between Trauma	
Symptomatology and Adolescent/Adult Victimization and Childhood Emotional Abuse	
in Hispanic and Non-Hispanic White Women1	115
Table 26. The Influence of Active Coping on the Relationship Between Physical Health	
and Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and	
Non-Hispanic White Women1	116
Table 27. The Influence of Active Coping on the Relationship Between General	
Psychological Distress and Adolescent/Adult Victimization and Childhood Emotional	
Abuse in Hispanic and Non-Hispanic White Women	117
Table 28. The Influence of Active Coping on the Relationship Between Alcohol Use and	
Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and Non-	
Hignoria White Women	1 1 Q



#### Chapter 1

#### Introduction

Sexual assault is a widespread problem in our culture today. National estimates of reported completed rape are estimated to be approximately13% for women in the general population (Ruggerio & Kilpatrick, 2003). In the National Women's Study (NWS), 13% of women reported experiencing a completed rape, with another 14% indicating a separate assault (Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). College women are at particularly high risk for being victimized, with almost 50% experiencing a sexual assault at some point during their college years, ranging from unwanted sexual contact to completed rape (Fisher, Cullen, Turner, & Leary, 2000; Koss, Gidycz, & Wisniewski, 1987).

These numbers indicate a disturbing trend. The widespread prevalence of sexual assault can often have immediate and long-term consequences for the person victimized.

Women who have experienced assault are at elevated risk for anxiety disorders such as Post-Traumatic Stress Disorder (PTSD) and other mental health consequences, such as depression, somatic symptoms, lowered self-esteem, eating disorders, and substance use (Briere & Jordan, 2004; Cloitre, Scarvalone, & Difede, 1997; Ellis, Atkeson, & Calhoun, 1981; Smith, Bryant-Davis, Tillman, & Marks, 2010). Victims of sexual assault also access health services with greater frequency, endorse more health complaints than nonvictimized women, (Conoscenti & McNally, 2006), and report higher levels of smoking and drinking (Kapur & Windish, 2011). In addition to the greater numbers of somatic complaints endorsed by women who have experienced an assault, they report poorer perceptions of their own health and more frequent contact with the healthcare



system (Kimerling & Calhoun, 1994). Moreover, women who report a history of both childhood and adolescent victimization have an 80% increased risk of adolescent pregnancy (Young, Deardorff, Ozer, & Lahiff, 2011), which has long been associated with lower birth weights, increased infant mortality, and depressed economic opportunity. Finally, the most consistent predictor of future victimization is prior victimization (Gidycz & Coble, 2006; Koss & Dinero, 1989; Wyatt, Guthrie, & Notgrass, 1992) indicating that once a woman has experienced victimization, they are at increased risk for being victimized again.

#### **Ethnically Diverse Women and Sexual Victimization**

The relationship between ethnic diversity and victimization is not well understood.

Research has shown that ethnically diverse women face differential rates of sexual assault (Bryant-Davis, Chung, Tillman, & Belcourt, 2009; Freeman & Temple, 2010, Tjaden & Thoennes, 1998). Not all of the factors that may potentially endanger ethnically diverse women are known, but the existing literature illustrates that women of differing ethnicities have varied and diverse consequences of assault, some of which will be explored further in this proposal.

Hispanic women are at increased risk for attempted rape (Kalof, 2000) but experience lower lifetime rates of completed rape than Non-Hispanic white women. Approximately 15% of Hispanic women report a sexual assault (Bryant-Davis et al., 2009) contrasted with 18.4% of non-Hispanics (Tjaden & Thoennes, 1998). As with other ethnic groups, childhood sexual assault in Hispanic women predicts future victimization, as well (Widom, Czaja, & Dutton, 2008). Though Hispanic women are less likely to report a rape than Non-Hispanic white women, in a sample of impoverished Hispanic women,



over half reported experiencing abuse (either physical or sexual) perpetrated by an intimate partner (El-Bassel, Gilbert, Krishnan, Schilling, Gaeta & Purpura, 1998). With respect to ethnically diverse college women who report childhood sexual abuse, African-Americans report the highest frequencies, followed by Hispanics (Ullman & Filipas, 2005).

American Indian/Alaska Native (AI/AN) women experience elevated risk for sexual assault when compared to women of other ethnicities—almost 34% of adult AI/AN women report having experienced a completed rape (Bachman, Zaykowski, Lanier, Poteyeva, & Kallmyer, 2010). Also noteworthy is the fact that AI/AN women are more likely to be threatened with a weapon and to require medical care for post-assault injuries (Bachman et al., 2010). Assaults perpetrated against AI/AN women also are far less likely to be reported. When reported, the complexity of jurisdiction between local law enforcement and tribal officials can present barriers towards arrests.

African-American women also are vulnerable to assault, reporting rates of forcible rape 50% higher than both Non-Hispanic White and Hispanic women (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007). Additionally, between 30% to 60% of adult African-American sexual assault survivors report having experienced childhood sexual assault (Banyard, Williams, Siegel, & West, 2002; Campbell, Greeson, Bybee, & Raja, 2008), once again illustrating the link between victimization and revictimization. African American women may also be vulnerable to sexual assault and violence within romantic relationships. African-American couples report twice the rate of sexual aggression than Non-Hispanic White couples (Ramisetty-Mikler, Caetano, & McGrath, 2007). Both



African-American and AI/AN women also are more at risk of intimate partner rape (Bachman et al., 2010; Bryant-Davis et al., 2009).

#### **Consequences of Sexual Assault among Ethnically Diverse Women**

Much like the differential rates of assault among all ethnic groups, the negative sequelae of sexual assault also is highly variable. The link between victimization and both mental and physical health consequences for women has long been established. Consequences of sexual assault include injuries incurred directly from the assault itself, reproductive and gynecological problems, and increased physical health problems (Golding, 1999; Wyatt et al., 1992). As previously noted, survivors of assault are also at increased risk for revictimization (Koss et al., 1987; Messman-Moore & Brown, 2006). Within ethnically diverse groups of women, Mexican-American women also have been found to have significantly more alcohol dependence post-assault than other ethnic groups (Lown & Vega, 2001). Mexican-American women who have reported a history of sexual violence within a romantic relationship are more likely to report poor health than women who do not report sexual IPV (Lown & Vega, 2001), including symptoms such as heart problems and a general feelings of poorer health. Among non-Hispanic white, Hispanic, and African-American women, a relationship between sexual assault and severe headaches has been found (Golding, 1999), indicating that somatic complaints after assault are not isolated to women of certain ethnicities.

AI/AN women who have experienced an assault are more likely to engage in risky drug-related behavior and risky sexual behavior, increasing the risk of HIV(Simoni, Sehgal, & Walters, 2004). Stigma about getting tested can mean that cases of HIV and other STIs go undiagnosed, putting people around the individual at risk. The psychological



consequences of rape and sexual assault also are elevated for ethnically diverse women. After experiencing a sexual assault, ethnically diverse women experience higher rates of PTSD, depression, substance abuse/use, suicidal ideation, and somatic complaints than non-Hispanic white women (Bryant-Davis et al., 2009; Kimerling & Calhoun, 1994). Ethnically diverse women also are more likely to live in poverty than their Non-Hispanic White counterparts (U.S. Department of Health and Human Services, 2011). Because of this disparity in resources, a diverse woman may have diminished access to both medical and mental healthcare (Institute of Medicine, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, 2011). Pragmatic issues of insurance, lack of a provider, financial difficulties and transportation problems are more likely to negatively affect women of color, with African-Americans being twice as likely to be uninsured as Non-Hispanic Whites and Hispanics being three times as likely (Carpenter-Song, Whitley, Lawson, Quimby, & Drake, 2011). If an individual experiences an assault but lacks health insurance or transportation to a free clinic, the process of recovery from the assault becomes much more difficult. STI and pregnancy testing are particularly important after a sexual assault, but lack of financial resources may present a barrier to receiving medical or mental healthcare. In the case of Hispanic women, fear of deportation or nebulous immigration status may present a barrier to help-seeking. Indigenous women, when confronted by a history of ineffective governmental assistance, may simply not have anywhere to turn. African-American women may have barriers to disclosure and help-seeking stemming from cultural beliefs that victims of sexual assault are to blame for their injuries (Bryant-Davis et al., 2009). It is clear that assaults may have different consequences for different groups, and it is equally clear there is a paucity



of research on the consequences and experience of sexual assault among women who are ethnic minorities.

## Childhood Abuse (Physical, Emotional and Sexual)

Experiencing abuse in childhood has also been linked to poor outcomes for individuals. Childhood physical abuse has been linked to less satisfying intimate relationships, increased intimate partner violence, and increased likelihood of perpetrating intimate partner violence (McLeod, Fergusson, & Horwood, 2014). Emotional and physical abuse and emotional neglect has been shown to predict persistent depressive and anxiety disorders (Hovens, Giltay, Wiersma, Spinhoven, Penninx, & Zitman, 2012). Interestingly, the same study found that childhood physical abuse did not predict chronic (after a two year follow-up) depressive or anxious symptomatology. Additionally, among African-American and non-Hispanic whites, childhood physical and sexual abuse has been linked to chronic pain in adulthood (Hart-Johnson & Green, 2012). In a 2014 study examining the relationship among negative early childhood experiences (emotional, physical, sexual abuse, among others) and general well-being and psychosocial stressors, all adverse childhood experiences except physical abuse and early death of a parent or caregiver were significantly related to poorer outcomes (McElroy & Hevey, 2014). Childhood sexual abuse has been shown to predict PTSD among enlisted soldiers, as well as decreased marital satisfaction (Miller, Schaefer, Renshaw, & Blais, 2013). The literature surrounding childhood abuse is robust and extensive, and largely points to the gravity of such experiences and the increased risk of negative outcomes in adulthood (Norman, Byambaa, Butchart, Scott, & Vos, 2012; Nanni, Uher, & Danese, 2014; Hilbert, Hamilton-Giachritsis, & Dixon, 2014).



#### **Protective Factors**

To date, very little research on factors that protect women from experiencing increased negative consequences of sexual assault. Even less is known about what may be protective for ethnically diverse women. Acculturation is one factor that may offer protection from such consequences. In collectivistic cultures like Hispanic, African-American, or AI/AN cultures, social networks are complex structures that may serve to comfort a woman after experiencing a sexual assault. Having a strong support network can be crucial to a woman's empowerment and recovery after an assault. African American women with strong support from their immediate social network have been found to be less likely to report experiencing PTSD and depression after a sexual assault (Bryant-Davis, Ullman, Tsong, & Gobin, 2011).

It may be possible that adhering to one's cultural norms and maintaining ties with tradition may be protective against increased consequences post-victimization, but it is not yet clear if that is the case. Another possibility is that the stress of integrating into a new culture combined with victimization may make people more vulnerable to lasting consequences, whereas limiting acculturative stress may be protective and comforting. For example, living in close-knit enclaves with people of similar ethnic background may provide a support network not available elsewhere. Hispanic women who adhere less rigidly to Anglo culture have been shown to be less likely to develop PTSD, depression, or extreme anger after sexual victimization (Cuevas, Sabina, & Bell, 2012), which has promising implications for newly-arrived immigrants, and shows that there is value in retaining some cultural ties and traditions instead of trying to quickly assimilate into a



new culture. However, the protective factors explored in this study were limited to acculturation and immigrant status, leaving other factors such as religiosity unexplored. There are other factors that may be potentially protective as well. Immigrants are more likely to be strong adherents of religion (Ebaugh & Chafetz, 2000). Approximately 70% of Hispanics endorse Catholicism as their religious affiliation, and another 23% list Protestant as their religion (Espinosa, Elizondo & Miranda, 2005). The presence of religion may also have a different role in helping victimized women cope with their assaults. Post-assault, a woman with strong spiritual connections may be able to find meaning in her assault, or may be able to reconcile her own feelings of anger with the feeling that her attacker will meet justice someday. Additionally, more conservative sexual attitudes in undergraduates high on religiosity has been further associated with decreased risky sexual behavior (Simons, Burt, & Peterson, 2009). Church attendance has been found to be negatively correlated with depression and other mental illnesses (Jansen, Motley, & Hovey, 2010; Merrill & Salazar, 2002). However, African-American women who have used religious coping have reported greater PTSD and depressive symptoms (Bryant-Davis et al., 2011). The mixed findings are unclear, but it is possible that women who use solely religious coping without the community and social benefits regular church attendance offers may feel more isolated. Despite the mixed findings, it is clear that religion may play a role in protecting women who have been sexually assaulted from lasting negative consequences.

# **College Women and Sexual Assault**

The vast majority of the extant literature with respect to sexual assault in college women has focused on non-Hispanic white college students. African-American women at



Historically Black Colleges (HBCUs) who are assaulted by a known perpetrator are significantly more likely to show depressive symptoms and PTSD than women who have not been assaulted (Lindquist, Barrick, Krebs, Crosby, Lockard, & Sanders-Phillips, 2013). This is consistent with other existing research showing that victimized women are at elevated risk for negative outcomes post-assault. Additionally, for non-Hispanic white women, but not for ethnically diverse women, depression and anxiety have been shown to mediate the relationship between sexual assault and problem drinking, such that more depressed non-Hispanic white women who have experienced assault are more likely to engage in problem drinking to cope (Littleton, Grills-Taquechel, Buck, Rosman, & Dodd, 2013). This was not shown to be the case with ethnically diverse women. Additionally, partial mediation models in the same study showed that non-Hispanic white women were more likely to use risky health behaviors (problem drinking, risky sexual behavior) to cope with negative affect resulting from sexual assault than ethnically diverse women (Littleton et al, 2013). Though much of the literature has been conducted with non-Hispanic white college students, studies that focus on diverse groups could provide a substantial contribution to the literature.

#### **Limitations of Past Research**

To date, research on sexual assault has primarily focused on sexual assault as experienced by Non-Hispanic white women (Koss et al., 1987; Littleton & Grills-Taquechel, 2011; Messman-Moore & Brown, 2006; Woodhams, Hollin, Bull, & Cooke, 2012). While it is true that Non-Hispanic white women are more likely to experience a completed rape than Hispanic women, African-American and AI/AN women are more likely to experience rape than Non-Hispanic white women; thus, they are at particularly high risk for sexual



American and Hispanic women but what exists is somewhat contradictory. Researchers are often limited by the types of samples available at large, predominantly non-Hispanic White universities, thus, it follows that the samples available are mostly non-Hispanic White students. The current study aimed to collect data online, collecting data from diverse women in university and community settings.

#### **Benefits of Online Data Collection**

Data collection online has several unique benefits for a study of this nature. First, as previously stated, much research in this area has been limited to college samples, which are predominantly Non-Hispanic White students. Internet based surveys can also be offered to a group of potential subjects that has been identified as an at-risk population, such as message boards belonging to RAINN (Rape, Abuse and Incest National Network) or crisis centers such as Agora Crisis Center or Rape Crisis Center of Central New Mexico. Because online data collection is only limited by the parameters set by the researcher, it facilitates recruitment of participants outside the UNM community, who are of varying ethnicity. Secondly, cost is another advantage. There are no printing or mailing costs, so collecting data online can be an extremely economical way to collect a large sample (Heiervang & Goodman, 2011). Third, online data collection software is optimized to link with statistical software programs such as SPSS, leaving the likelihood of errors very small. Finally, because women will be free to participate in the survey from the privacy and comfort of their homes, confidentiality is assured. When assessing the suitability of online data collection, participants have been found to be more likely to admit that they have experienced mental illness in the past than those questioned in a face



to face setting (Henderson, Evans-lacko, Flach, & Thornicroft, 2012) suggesting that confidentiality and stigma may influence respondents' honesty. Because sexual victimization is a highly sensitive topic, assuring participants that their confidentiality will be respected is crucial. Online surveys also have been found to be as externally valid as mail-in surveys, but with considerably less expense (Deutskens, Jong, Ruyter, & Wetzels, 2006).

#### **Present Study**

The present study aimed to address shortcomings in the extant body of literature with respect to ethnically diverse women who experience sexual assault. The goals of the current study were (a) to examine the negative consequences of sexual assault and the differential outcomes of these effects for ethnically diverse women, and (b) to extend previous research on various health consequences in women who have experienced assault by examining factors that may potentially protect women of differing ethnicities from increased negative consequences of assault.

Because women aged 18-24 have been identified as a group most at risk for experiencing sexual assault (Krebs, Lindquist, Warner, Fisher, & Martin, 2007; DOJ, BJS Web site, 2004) only participants within that age range were eligible. Women of all ethnicities were encouraged to participate. A battery of surveys assessing victimization history (including adult/adolescent sexual victimization, childhood emotional, sexual, and physical abuse), religiosity, acculturation, alcohol use, trauma symptomatology, somatic complaints, general psychological distress, coping styles, and posttraumatic growth were offered online. Participants were asked to spend roughly 30-45 minutes completing these



questionnaires for a chance to win one of four Amazon gift cards (valued at \$50 each).

All responses were confidential.

# **Specific Hypotheses**

Based on the previous review, several predictions were made for this study. It was expected that:

- a) As victimization (adult/adolescent sexual victimization or childhood abuse) severity worsens, ethnically diverse women who have experienced traumatic events such as sexual victimization or abuse will report increased negative mental and physical health consequences relative to non-Hispanic white women who have experienced similar levels of victimization severity;
- b) Level of acculturation will moderate the influence of victimization on negative mental and physical health outcomes, such that less acculturated women at similar levels of victimization severity will report experiencing fewer negative outcomes relative to more acculturated women at comparable severity levels;
- c) Religiosity will moderate the influence of victimization on negative mental and physical health outcomes, such that victimized women that are more religious would report fewer negative outcomes relative to less religious women at similar levels of victimization severity; and
- d) Higher levels of post-traumatic growth will moderate the association between victimization history (specifically, adult/adolescent sexual victimization) and negative mental and physical consequences experienced by women who have been victimized, such that women higher on posttraumatic growth would experience fewer negative



outcomes relative to women of similar levels of victimization severity that are lower in posttraumatic growth.

Because of a paucity of data, some analyses in the current study were exploratory in nature. Specifically, this study explored whether:

- e) Ethnically diverse women who have experienced victimization (as measured by adult/adolescent victimization and childhood trauma) endorsed differential coping strategies than non-Hispanic white women who had also experienced similar levels of victimization severity.
- f) Differential coping strategies may moderate negative outcomes among victimized women of differing ethnicities.



#### Chapter 2

#### Method

# **Participants**

Recruitment was limited to women aged 18-24 years old. Initial sample size was substantial (n=411). The sample was ethnically diverse, with 2.4% African-American (n=10), 4.6% Asian/Pacific Islander (n=19), 3.4% American Indian/Alaska Native (n=14), 2.9% 'Other' (n=12), 38% Hispanic (n=156), and 48.2% non-Hispanic White (n=198) participants. Additionally, .5% of participants (n=2) declined to answer, for the total N=411. Given the small number of women in some ethnic categories, only Hispanic and non-Hispanic white women were included in the final analyses. The mean age of that sample was 20.23 years old (SD=1.68). The sample was predominantly (86.7%) single (n=307), while 10.2% of the sample reported living with a significant other (n=36). Married women comprised 2.8% of the sample (n=10) and .3% of respondents reported being divorced (n=1). With respect to sexual orientation, 82.8% of participants identified their sexual orientation as heterosexual (n=293), 5.9% of respondents identified as lesbian (n=21) and 11.3% of participants identified as bisexual (n=40). Demographic information is presented in Table 1.

#### Measures

Demographic Questionnaire. (See Appendix A). This measure was used to collect basic demographic information, including age, biological sex, gender, marital status, sexual orientation, race, level of education, approximate income growing up, approximate current income, and employment status.



Childhood Trauma Questionnaire. (CTQ; (Bernstein, Fink, Handelsman, & Foote, 1998)(See Appendix A). This 28-item self-report measure is designed to screen for histories of abuse and neglect, assessing five different types of emotional and physical abuse and neglect: emotional neglect (not being given affection or love), emotional abuse (being insulted or verbally attacked), physical neglect(not having enough to eat or having clean clothing to wear), physical abuse (being hit or otherwise physically harmed), and sexual abuse (an adult sexually touching or forcing the child to engage in sexual acts). Each individual subscale generates a summary score with higher scores indicating more severe victimization in that domain. The CTQ has been found to be a reliable measure of childhood trauma in community samples (Scher, Stein, Asmundson, McCreary, & Forde, 2001), with test-retest reliability ranging from .79 to .86. Internal consistency has been computed both for the scale as a whole ( $\alpha = .91$ ) and for all the subscales as well. Cronbach's alphas for the subscales ranged from .76 to .97. Cronbach's alpha for the current study was .55. Using cutoffs of 13 or higher, 10 or higher, or 8 or higher (Bernstein & Fink, 1998) for moderate to severe childhood abuse for emotional abuse, physical abuse, and sexual abuse, respectively, 13.2% of the sample (n=47) reported experiencing moderate to severe emotional abuse, 13.6% of the sample (n=48) reported experiencing moderate to severe physical abuse, and 18.3% (n=65) of the current sample reported experiencing moderate to severe childhood sexual abuse. Sexual Experiences Survey. (SES; (Koss et al., 1987) (See Appendix A). The SES is a 10-item self-report measure designed to assess various degrees of victimization severity since the age of 14. The SES has been found to be a reliable and valid measure of selfreported sexual assault. Koss and Gidycz (1985) reported that the SES had an internal



consistency of  $\alpha = .74$ , a one-week test-retest reliability of r = .93, and a correlation of r = .73 with interview responses. The SES uses specific definitions of sexual assault and asks participants to indicate whether or not the event occurred (i.e., no or yes). The SES describes four different types of victimization experiences, from least to most severe: unwanted contact, which includes unwanted sexual touching or fondling, sexual coercion, which includes sexual intercourse that occurs as a result of continued arguments and pressure, attempted rape, which includes attempted sexual intercourse where physical force or drugs is either threatened or actually used, or a perpetrator uses his position of authority, and completed rape, which includes oral, anal, or vaginal intercourse that occurs as a result of threats of violence or the use of drugs, or when the perpetrator uses his authority to obtain sexual contact. Victimization was coded as a continuous variable, with 0 = no unwanted sexual experience; 1 = unwanted sexual contact; 2 = sexual coercion; 3 = attempted rape; 4 = rape. Cronbach's alpha for the current study was .75. In the present study, 59.6% (n=211) of participants reported experiencing no adult/adolescent sexual victimization, 8.5% of respondents (n=30) reported experiencing unwanted sexual contact, 11% of participants (n=39) reported sexual coercion, 7.3% of the sample (n=26) reported having experienced attempted rape, and 13.6% of participants indicated that the most severe victimization they had experienced was completed rape (n=48). A summary of victimization severity is given in Table 2.

*Trauma Symptom Checklist.* (TSC; Briere, 1996) (See Appendix A). The TSC is a 40-question instrument designed to assess the degree to which participants are experiencing symptomatology related to childhood or adulthood trauma. Participants were asked to



indicate on a scale from 0-3, how much they had experienced trauma symptoms (e.g., uncontrollable crying, early morning waking, nightmares) for the past month. Higher scores indicate higher trauma symptomatology. The TSC has been found to be a reliable measure of trauma symptomatology, with alphas averaging between .89 and .91. Cronbach's alpha for the current study was .94.

Patient Health Questionnaire. (PHQ-15; Kroenke, Spitzer, & Williams, 2002.) (See Appendix A). The PHQ is a short, 15-item survey designed to identify somatic complaints. Items are scored from 0 ("not bothered at all") to 2 ("bothered a lot"). A summary score is calculated, with higher scores indicating more somatic complaints. Internal consistency of the PHQ-15 has been found to be excellent, with a Cronbach's alpha of .80 in both primary care and gynecological samples. Cronbach's alpha for the current study was .82.

The Alcohol Use Disorders Identification Test. (AUDIT-C; Bush & Kivlahan, 1998) (See Appendix A). The AUDIT-C is a three item measure designed to identify hazardous drinking. An overall summary score is tallied with higher scores equaling more problem drinking. The AUDIT-C has been shown to be a reliable research instrument, and is used in a variety of settings. Sensitivity ranges from .48 to .80, and specificity ranges from .87 to .99 (Bush & Kivlahan, 1998). Cronbach's alpha for the current study was .65.

Symptom Checklist 90. (SCL-90; Derogatis, Lipman, & Covi, 2007) (See Appendix A).

The SCL-90 is a comprehensive, 90-item measure of general distress containing nine subscales. Those subscales are (a) Somatization (SOM), (b) Obsessive-compulsive (O-C), (c) Interpersonal Sensitivity (I-S), (d) Depression (DEP), I Anxiety (ANX), (f) Hostility (HOS), (h) Phobic Anxiety (PHOB), (i) Paranoid Ideation (PAR) and (j)



Psychoticism (PSY). The Global Severity Index (or overall measure of general psychological distress) has been shown to be reliable for online and paper and pencil administrations with alphas ranging from .96-.97 (Vallejo, Jordan, Diaz, Comeche & Ortega, 2007). The Global Severity Index is an average of all 90 items on the instrument, with higher average scores indicating greater general psychological distress. Cronbach's alpha for the current study was .98.

Scale of Ethnic Experiences. (SEE; Malcarne, Chavira, Fernandez, & Liu, 2006) (See Appendix A). The SEE self-report instrument is designed to measure varying ethnicity-related constructs, such as perceived discrimination, social affiliation, and ethnic identity. The SEE contains 4 subscales: (a) Mainstream Comfort, (b) Ethnic Identity, (c) Perceived Discrimination, and (d) Social Affiliation, which have been validated with internal consistency coefficients ranging from .83 to .91 (Malcarne et al, 2006). All four subscales will be explored with all ethnicities, as no overall score for the SEE exists. Because the SEE was developed to assess different components of ethnic identity and experiences, no single unitary construct of 'ethnicity' is measured. All scales have been validated for use with African-American, Mexican-American, non-Hispanic White, and Filipino-Americans (Malcarne et al., 2006). Cronbach's alpha for the current study was .67.

Religious Practices and Beliefs. (RPB; Connors, Tonigan, & Miller, 1996) (See Appendix A). The RPB is a brief instrument used to measure religious and spiritual behaviors. A summary score is used, with higher scores indicating higher levels of religious and spiritual behaviors. Test-retest reliability of this measure is quite strong (r=.94 or higher), indicating that this scale is highly replicable. Overall scale reliability



has been shown to be .86 (Tonigan et al, 1996), indicating that it is a psychometrically sound instrument to measure religiosity and spiritual behaviors. Cronbach's alpha for the current study was .86.

Brief COPE Inventory. (Brief COPE; Carver, 1997) (See Appendix A). The Brief COPE is the abridged version of the COPE inventory and presents fourteen scales all assessing different coping dimensions: (a) active coping, (b) planning, (c) using instrumental support, (d) using emotional support, (e) venting, (f) behavioral disengagement, (g) selfdistraction, (h) self-blame, (i) positive reframing, (j) humor, (k) denial, (l) acceptance, (m) religion, and (n) substance use. Each scale contains two items (28 altogether), which are summed for a total score on that dimension. No overall summary score for The Brief COPE exists. The Brief COPE has been found to be a reliable measure of coping in adults. Cronbach's alpha ranges from .50 to .90 on all of the subscales with only three (venting, denial, and acceptance) being less than .60 (Carver, 1997). The variables of theoretical interest that were included in the statistical analyses for the current work were: active coping (taking action to improve the situation, concentrating efforts into doing something to improve the situation), planning (thinking of a strategy, planning what steps to take), humor (making jokes about the situation, poking fun at oneself), acceptance (accepting the reality of the situation, learning to live with it), and positive reframing (trying to see things in a different light, trying to find the good in what happened). Cronbach's alpha for the current study was .85.

Post-Traumatic Growth Inventory. (PTGI; Tedeschi, 1995) (See Appendix A). The PTGI instrument measures different areas of change: change in self, change in relationships, and changes in philosophy in response to a traumatic event. The PTGI



contains 5 subscales which are New Possibilities, Relating to Others, Personal Strength, Spiritual Change, and Appreciation of life. The PTGI has been widely used to measure adult post-traumatic growth, and has been found to be a reliable measure of post traumatic growth, with a Cronbach's alpha of .90 (Tedeschi, 1995). The PTGI provides an overall summary score, with higher total PTGI scores indicating higher levels of posttraumatic growth. No cutoffs are provided by the authors. The PTGI also provides 5 subscale scores, where higher subscale scores indicate more growth in a particular area (Hooper, Marotta, & Depuy, 2009). Cronbach's alpha for the current study was .97.

#### **Procedure**

Recruitment was limited to New Mexico. Participants were recruited primarily through advertisement on online message boards, with particular emphasis given to recruiting diverse populations (e.g., recruiting through El Centro de La Raza and other diversity-focused organizations). Participants were also recruited through ads in the Alibi, and Daily Lobo. Female UNM students aged 18-24 (n=8,672) also were emailed a link to the survey and invited to participate. Those who received the recruitment email were invited to participate in a study about perceptions of their own health, experiences with victimization, and ethnic identity.

Once participants accessed the study website, they were shown a detailed electronic consent form which outlined the goals of the study as well as any potential risks.

Participants were asked to indicate that they had read and understood the form and were 18 years of age or older. The consent document also contained contact information for the Trauma Research Lab, and the co-Principal Investigators. Prospective participants were explicitly informed that choosing to enter the online study implied consent for



participation. Participants were given the option to discontinue participation at any time, for any reason, without penalty. After consent, a list of resources was presented, so that, if participants felt distressed by participation, or if they had experienced an assault in the past, they would have access to places in the community that might assist them.

Participants were shown the list of resources at the beginning as well as the end in the case of attrition. Consultation with IRB members revealed this to be a common practice in online research when participants are being questioned about sensitive topics such as sexual assault.

Participants then were prompted to start the surveys. The study was designed so that each page was designated for a specific measure, rather than splitting longer measures up over several pages, to aid with attention. Time to complete the surveys ranged from 9 minutes to 8 hours and 45 minutes, with the mean completion time at 36 minutes. After completing the survey, participants were redirected to a secondary survey where they were given the option to provide contact information for the drawing. At this point, the participants were debriefed with a brief statement of the rationale for the study and contact information for the Trauma Research Lab, as well as the Principal Investigators (Appendix B). Participants were again shown the list of resources available to them, and the final page of the survey thanked them for their time, participation, and provided contact information for the researchers conducting the study, the Principal Investigator, and the Institutional Review Board at the University of New Mexico.

#### **Data Analytic Strategy**

Bivariate correlations first were conducted, and variables that were not significantly associated with the outcome variables were not included in subsequent analyses. Multiple



regression analyses were used to test study hypotheses. For each analysis, separate regressions were performed for each ethnic group. For Hypothesis #1, each of the outcome variables (Physical Health Questionnaire (PHQ), general distress (SCL-90), trauma symptoms (TSC-40), and AUDIT-C were regressed separately onto sexual victimization history (as measured by the Sexual Experiences Survey) and childhood trauma (as measured by the Childhood Trauma Questionnaire), with separate regressions performed for each of the subscales within the Childhood Trauma Questionnaire (emotional abuse, physical abuse, and sexual abuse). For Hypothesis #2, the four outcome variables (PHQ, SCL-90, TSC-40 and AUDIT-C) were regressed separately onto trauma history (as measured by the SES and the CTQ) and level of acculturation (defined here as Mainstream Comfort and Perceived Discrimination), and the interactions between trauma history (again, adult/adolescent sexual victimization and childhood abuse, and Mainstream Comfort, and Perceived Discrimination). For Hypothesis #3, the four outcome variables were separately regressed onto religiosity/spirituality (RPB), and trauma history (as measured by adult/adolescent sexual victimization and childhood abuse), and the interactions between trauma history and religiosity. For Hypothesis #4, the four outcome variables were separately regressed onto posttraumatic growth (PTGI), and trauma history (as measured by adult/adolescent sexual victimization and childhood abuse). Further, the interaction between adult/adolescent sexual victimization and posttraumatic growth also was explored. Hypotheses 5 and 6 were exploratory in nature. For Hypothesis #5, active coping, coping through planning, positive reframing, humor and acceptance were regressed separately onto victimization history (adult/adolescent sexual victimization and childhood abuse), with separate analyses done for Hispanic and



non-Hispanic white women. For Hypothesis #6, the four outcome variables (PHQ, TSC-40, SCL-90, AUDIT-C) were regressed onto active coping, childhood emotional abuse, and the interaction between active coping and childhood emotional abuse, with separate analyses done for Hispanic and non-Hispanic white women.



## Chapter 3

#### Results

#### **Preliminary Analyses**

All variables first were checked for distributional properties to ensure that none departed substantially from normality. With the exception of variables where we would expect to see skewness (e.g., victimization variables), the data was normally distributed; thus, no corrections were necessary. Bivariate correlations were examined among all variables; these are presented in Table 3. Only predictors that were significantly associated with outcome variables were included in the final regression analyses.

To correct for a possible Type I error due to the number of comparisons, a Bonferroni correction was used, resulting in an adjusted alpha level of .003 (.05/17). Independent samples t-tests revealed that Hispanic and non-Hispanic white women did not differ with respect to age, marital status, level of education, AUDIT scores, trauma symptoms (TSC-40), physical health (PHQ-15), post-traumatic growth (PTGI), general distress (SCL-90), or style of coping (Brief COPE) (all ps > .05). Chi-square analyses showed no differences in victimization experiences (as measured by SES severity and childhood physical, emotional, or sexual abuse) between Hispanic and non-Hispanic white women. However, Hispanic women, as compared to non-Hispanic white women, endorsed greater religiosity (M = 24.39, SD = 10.41 vs. M = 19.76, SD = 10.76, respectively), t(345) = 10.764.03, p < .001. With respect to acculturation, Hispanic women and non-Hispanic white women differed on two domains. Specifically, Hispanic women, relative to non-Hispanic white women, reported higher Ethnic Identity (M = 42.41, SD = 8.26 vs. M = 35.12, SD =7.50, respectively), t(336) = 8.46, p < .001 and higher Perceived Discrimination (M =29.24, SD = 6.71 vs. M = 19.90, SD = 6.73, respectively), t(335) = 12.66, p < .001.

Hispanic and non-Hispanic white women did not significantly differ on Social Affiliation or Mainstream Comfort.

In total, 733 women began the survey, and 411 completed it, with 354 used for statistical analyses. To provide the most conservative estimate of sample size required, a post hoc power analysis was carried out in G\*power (Erdfelder & Buchner, 1996) utilizing the model with the most predictors. Achieved power was .56, indicating that the study was somewhat underpowered.

#### **Data Analyses**

Hypothesis 1: As victimization (adult/adolescent sexual victimization or childhood abuse) severity worsens, ethnically diverse women who have experienced traumatic events such as sexual victimization or abuse will report increased negative mental and physical health consequences relative to non-Hispanic white women who have experienced similar levels of victimization severity.

Trauma symptomatology was regressed onto victimization (defined here as adult/adolescent sexual victimization, and childhood emotional, physical, and sexual abuse). For Hispanic women, the variables in the model accounted for 37% of the variance in trauma symptomatology,  $R^2$ =.365, F(4,147)=20.59, p<.001. For Hispanic women, both adult/adolescent sexual victimization ( $\beta$ =.185, p=.01) and childhood emotional abuse ( $\beta$ =.512, p<.001) significantly predicted trauma symptomatology, with women who reported more severe victimization and abuse reporting greater trauma symptomatology. For non-Hispanic white women, the model accounted for 33% of the variance,  $R^2$ =.328, F(4,189)=22.55, p<.001. Adult/adolescent sexual victimization ( $\beta$ =.142, p=.03), childhood emotional abuse ( $\beta$ =.508, p<.001), and childhood sexual



abuse ( $\beta$ =.178, p=.01) all significantly predicted trauma symptomatology, with women who reported more severe victimization and abuse reporting greater trauma symptomatology. Childhood physical abuse significantly predicted trauma symptomatology for non-Hispanic white women ( $\beta$ =-.225, p=.003), such that women who experienced more severe childhood physical abuse reported less trauma symptomatology. Standardized regression coefficients were also compared to examine differences between Hispanic and non-Hispanic white women. Slopes testing (Soper, 2014; Cohen, Cohen, West, & Aiken, 2003) revealed no significant differences between Hispanic and non-Hispanic white women with respect to the relationship between adult/adolescent sexual victimization (p=.97) or childhood emotional abuse (p=.99) and trauma symptomatology. Table 4 summarizes the results of the regression analysis. With respect to somatic complaints, for Hispanic women, the model accounted for 31% of the variance,  $R^2$ =.314, F(4,136)=15.09, p<.001. Only childhood emotional abuse was significant for Hispanic women, such that more severe childhood emotional abuse significantly predicted more somatic complaints for Hispanic women ( $\beta$ =.458, p<.001). For non-Hispanic white women, the model accounted for 23% of the variance,  $R^2$ =.228, F(4,186)=13.40, p<.001. Childhood emotional abuse also significantly predicted somatic complaints for non-Hispanic white women ( $\beta$ =.464, p<.001), such that non-Hispanic white women who reported more severe childhood emotional abuse also reported more somatic complaints. Slopes testing revealed no significant differences between Hispanic and non-Hispanic white women with respect to the relationship between emotional abuse and somatic complaints (p=.95). Table 5 summarizes the results of this regression analysis.



With respect to the relationship between victimization history and general psychological distress, for Hispanic women, the model accounted for 31% of the variance,  $R^2$ =.313, F(4,145)=16.03, p<.001. More severe childhood emotional abuse ( $\beta$ =.523, p<.001) predicted higher levels of general psychological distress in Hispanic women. For non-Hispanic white women, the model accounted for 26% of the variance,  $R^2$ =.259, F(4, 186)=15.90, p<.001. More severe childhood emotional abuse also predicted higher levels of general psychological distress for non-Hispanic white women ( $\beta$ =.440, p<.001), as did more severe childhood sexual abuse ( $\beta$ =.228, p=.002). Slopes testing revealed significant differences between Hispanic and non-Hispanic whites with respect to the relationship between childhood emotional abuse and general psychological distress (p<.001), such that Hispanic women who experienced more severe childhood emotional abuse reported significantly greater general psychological distress. Table 6 summarizes the results of this regression analysis.

With respect to the relationship between victimization history and alcohol use, in Hispanic women, the model accounted for 8% of the variance,  $R^2$ =.078, F(4,121)=2.48, p=.04. Adolescent/adult sexual victimization was found to be a significant predictor of alcohol use in Hispanic women ( $\beta$ =.245, p=.01), with adult/adolescent victimization predicting higher scores of alcohol use. For non-Hispanic white women the model accounted for 10% of the variance,  $R^2$ =.095, F(4,155)=3.98, p=.004., only adolescent/adult sexual victimization was found to be a significant predictor of alcohol use in non-Hispanic white women ( $\beta$ =.300, p<.001), such that women with more severe adolescent/adult sexual victimization reported more alcohol use. Slopes testing revealed there to be no significant differences between Hispanic and non-Hispanic whites with



respect to the relationship between adult/adolescent sexual abuse and alcohol use (p=.72). Table 7 summarizes the results of this regression analysis. Thus, with the exception of the differences in general psychological distress between Hispanics and non-Hispanic whites, in general, Hypothesis 1 was not supported.

*Hypothesis 2:* Level of acculturation will moderate the influence of victimization on negative mental and physical health outcomes, such that less acculturated women at similar levels of victimization severity will report experiencing fewer negative outcomes relative to more acculturated women at comparable severity levels.

Trauma symptomatology was regressed onto acculturation (defined as perceived discrimination and mainstream comfort), childhood emotional, sexual, and physical abuse, and adult/adolescent sexual victimization. Interaction terms of perceived discrimination x adult/adolescent sexual victimization, perceived discrimination x childhood emotional abuse, perceived discrimination x childhood sexual abuse, perceived discrimination x childhood physical abuse, mainstream comfort x adult/adolescent sexual victimization, mainstream comfort x childhood emotional abuse, mainstream comfort x childhood sexual abuse, and mainstream comfort x childhood physical abuse were created, and trauma symptomatology was regressed onto those, as well. For Hispanic women, the model accounted for 47% of the variance,  $R^2$ =.474, F(14, 140)=8.12, p<.001. For Hispanic women, adult/adolescent sexual victimization ( $\beta$ =.154, p=.018), childhood emotional abuse ( $\beta$ =.498, p<.001) and perceived discrimination ( $\beta$ =.270, p<.001) significantly predicted trauma symptomatology, such that more severe experiences of adult/adolescent victimization, childhood emotional abuse, and perceived discrimination predicted increased trauma symptomatology. The interactions between perceived



discrimination and physical abuse ( $\beta$ =.215, p=.03) and mainstream comfort and physical abuse ( $\beta$ =.254, p=.026) also were significant. These interactions were decomposed using the simple slopes method (Aiken & West, 1991). Using Preacher, Bauer, and Curran's method (2006) for estimating simple slopes, means-centered predictor variables were created for all analyses, and slopes were estimated at one standard deviation above the mean, at the mean, and one standard deviation below the mean. For Hispanic women with low levels of perceived discrimination, there was a significant negative relationship between childhood physical abuse and trauma symptomatology ( $\beta$ =-.818, p=.04), such that Hispanic women with lower levels of perceived discrimination experienced less trauma symptomatology. The simple slopes for this analysis are presented in Figure 1. For individuals at one standard deviation below the mean for mainstream comfort, the relationship between trauma symptomatology and physical abuse was significant ( $\beta$ =-1.42, p=.02), such that Hispanic women who experienced greater childhood physical abuse reported lesser trauma symptomatology. The simple slopes for this analysis are presented in Figure 2.

For non-Hispanic white women, the model accounted for 40% of the variance,  $R^2$ =.401, F(14, 179)=7.90, p<.001. In non-Hispanic white women, adult/adolescent sexual victimization ( $\beta$ =.124, p<.001), childhood emotional abuse ( $\beta$ =.560, p<.001), childhood sexual abuse ( $\beta$ =.159, p=.04), and childhood physical abuse ( $\beta$ =-.220, p=.006) all significantly predicted trauma symptomatology. More severe childhood emotional abuse, adult/adolescent sexual victimization, and childhood sexual abuse predicted greater trauma symptomatology, and more severe childhood physical abuse predicted lesser trauma symptomatology. Slopes testing revealed that Hispanic and non-Hispanic white



women did not differ with respect to the strength of the relationships between adult/adolescent sexual victimization (p=.72) or childhood emotional abuse (p=.88) and trauma symptomatology. No significant interactions were found for Non-Hispanic white women. Table 8 summarizes the results of this regression analysis.

Physical health was regressed onto acculturation (defined as perceived discrimination and mainstream comfort), childhood abuse, and adolescent/adult sexual victimization. Interaction terms of perceived discrimination x adult/adolescent sexual victimization, perceived discrimination x childhood emotional abuse, perceived discrimination x childhood sexual abuse, perceived discrimination x childhood physical abuse, mainstream comfort x adult/adolescent sexual victimization, mainstream comfort x childhood emotional abuse, mainstream comfort x childhood sexual abuse, and mainstream comfort x childhood physical abuse were created, and trauma symptomatology was regressed onto those, as well. For Hispanic women, the model accounted for 46% of the variance,  $R^2$ =.463, F(14, 131)=7.21, p<.001. For Hispanic women childhood emotional abuse significantly predicted somatic complaints ( $\beta$ =.470, p<.001), such that Hispanic women who experienced more severe childhood emotional abuse reported more somatic complaints. Perceived discrimination also predicted somatic complaints in Hispanic women ( $\beta$ =.315, p<.001), with individuals who reported more experiences of discrimination also reporting increased somatic complaints. A significant interaction also was found between perceived discrimination and physical abuse ( $\beta = .410$ , p < .001). For Hispanic women at one standard deviation above the mean in perceived discrimination, the relationship was significant ( $\beta$ =.729, p=.003), with those women reporting more somatic complaints. For Hispanic women at one standard



deviation below the mean on perceived discrimination, the relationship between somatic complaints and childhood physical abuse was significant ( $\beta$ =.719, p=.005), such that women at one standard deviation below the mean on perceived discrimination reported fewer somatic complaints. The simple slopes for this analysis are presented in Figure 3. The interaction between mainstream comfort and adult/adolescent sexual victimization was significant ( $\beta$ =.175, p=.043). At one standard deviation above the mean on mainstream comfort, the relationship between mainstream comfort and adult/adolescent sexual victimization was significant ( $\beta$ =.998, p=.01) indicating that Hispanic women who were higher on mainstream comfort that had experienced adult/adolescent sexual victimization also experienced more somatic complaints. The simple slopes for this analysis are presented in Figure 4.

Additionally, for Hispanic women, there was a significant interaction of mainstream comfort x childhood emotional abuse ( $\beta$ =-.254, p=.038). For Hispanic women at one standard deviation below the mean ( $\beta$ =.720, p<.001), and for Hispanic women that were at a mean level of mainstream comfort ( $\beta$ =.479, p<.001), significant relationships were found between mainstream comfort and childhood emotional abuse, such that Hispanic women at these levels of mainstream comfort who had experienced more severe emotional abuse also reported more somatic complaints. The simple slopes of this analysis are presented in Figure 5.

Finally, for Hispanic women, there was a significant interaction of mainstream comfort x physical abuse ( $\beta$ =.033, p=.007). The relationship between somatic complaints and childhood physical abuse was significant at one standard deviation below the mean for mainstream comfort ( $\beta$ =-.420, p=.03), such that Hispanic women at these levels of



mainstream comfort who experienced more severe childhood physical abuse reported fewer somatic complaints. The simple slopes for this analysis are presented in Figure 6. For non-Hispanic white women, the model accounted for 27% of the variance,  $R^2$ =.279, F(14,176)=4.48, p<.001. Childhood emotional abuse significantly predicted somatic complaints in non-Hispanic white women ( $\beta$  =.468, p<.001), such that non-Hispanic white women who experienced childhood emotional abuse also reported more somatic complaints. Slopes testing revealed that the strength of the relationship between childhood emotional abuse and somatic complaints did not differ significantly for Hispanic and non-Hispanic white women (p=.98). No significant interactions were found for Non-Hispanic white women. Table 9 summarizes the results of this regression analysis.

General psychological distress was regressed upon adult/adolescent victimization, childhood emotional, physical, and sexual abuse, perceived discrimination, mainstream comfort, perceived discrimination x adult/adolescent sexual victimization, perceived discrimination x childhood emotional abuse, perceived discrimination x childhood sexual abuse, perceived discrimination x childhood physical abuse, mainstream comfort x adult/adolescent sexual victimization, mainstream comfort x childhood emotional abuse, mainstream comfort x childhood sexual abuse, and mainstream comfort x childhood physical abuse. For Hispanic women, the model accounted for 46% of the variance,  $R^2$ =.456, F(14, 140)=7.56, p<.001. Childhood emotional abuse ( $\beta$ =.514, p<.001) and perceived discrimination ( $\beta$ =.256, p=.002) both significantly predicted greater general psychological distress. Additionally, the interactions of perceived discrimination x childhood physical abuse ( $\beta$ =.312, p=.002) and mainstream comfort x childhood physical



abuse ( $\beta$ =.249, p=.032) were significant for Hispanic women. For Hispanic women, the interaction between general psychological distress and physical abuse was significant at both one standard deviation above and one standard deviation below the mean of perceived discrimination, such that Hispanic women who reported more severe childhood physical abuse that had low levels of perceived discrimination reported significantly less general psychological distress ( $\beta$  =-.068, p=.01), and Hispanic women, who were physically abused and had high levels of perceived discrimination reported significantly greater general psychological distress ( $\beta$  =.062, p=.02). The simple slopes for this analysis are presented in Figure 7. Upon decomposing the interaction between mainstream comfort, general psychological distress, and childhood physical abuse, the interaction was not significant at low, mean or high levels of mainstream comfort. Thus, though a significant interaction was found, it was not revealed through this analysis. The simple slopes for this analysis are presented in Figure 8.

In non-Hispanic white women, the model accounted for 35% of the variance,  $R^2$ =.349, F(14, 178)=6.28, p<.001. Childhood emotional abuse ( $\beta$ =.450, p<.001), childhood sexual abuse ( $\beta$ =.197, p=.014), and childhood physical abuse ( $\beta$ =-.217, p=.009) all significantly predicted greater general psychological distress, such that non-Hispanic white women who experienced more severe childhood emotional or sexual abuse also reported greater general psychological distress, and those that experienced childhood physical abuse reported significantly less general psychological distress. No interaction terms were significant for non-Hispanic white women. In both Hispanic and non-Hispanic white women, childhood emotional abuse predicted greater general psychological distress; slopes testing revealed this association to be significantly stronger for Hispanic women



than non-Hispanic white women (p<.001). Table 10 summarizes the results of this regression analysis.

Alcohol use was regressed onto adult/adolescent sexual victimization, childhood emotional, physical, and sexual abuse, perceived discrimination, mainstream comfort, perceived discrimination x adult/adolescent sexual victimization, perceived discrimination x childhood emotional abuse, perceived discrimination x childhood sexual abuse, perceived discrimination x childhood physical abuse, mainstream comfort x adult/adolescent sexual victimization, mainstream comfort x childhood emotional abuse, mainstream comfort x childhood sexual abuse, and mainstream comfort x childhood physical abuse. For Hispanic women, the model was not significant,  $R^2$ =.090, F(14, 114)=.704, p=. 766. For non-Hispanic white women, adult/adolescent sexual victimization significantly predicted alcohol use ( $\beta$ =.335, p<.001). The model for Non-Hispanic white women accounted for 22% of the variance,  $R^2$ =.223, F(14, 146)=2.71, p=.002. No significant interactions were found in either Hispanic or Non-Hispanic white women. Overall, Hypothesis 2 was partially supported. Table 11 summarizes the results of this regression analysis.

*Hypothesis 3:* Religiosity will moderate the influence of victimization on negative mental and physical health outcomes, such that victimized women that are more religious would report fewer negative outcomes relative to less religious women at similar levels of victimization severity.

Trauma symptomatology was regressed onto adult/adolescent victimization, childhood emotional, physical, or sexual abuse, religiosity, religiosity x adult/adolescent sexual victimization, religiosity x childhood emotional abuse, religiosity x childhood sexual



abuse, and religiosity x childhood physical abuse. For Hispanic women, the model accounted for 40% of the variance,  $R^2$ =.409, F(9, 145)=10.47, p<.001. Adult/adolescent sexual victimization ( $\beta$ =.151, p=.04;) and childhood emotional abuse ( $\beta$ =.497, p<.001) significantly predicted trauma symptomatology, such that Hispanic women who reported more severe adult/adolescent sexual victimization and more severe childhood emotional abuse also reported greater trauma symptomatology. For Non-Hispanic white women, the model accounted for 35% of the variance,  $R^2$ =.354, F(9, 145)=10.67, p<.001. Adult/adolescent sexual victimization ( $\beta$ =.148, p=.033), childhood emotional abuse  $(\beta=.486, p<.001)$ , childhood physical abuse  $(\beta=.210, p=.013)$  and childhood sexual abuse ( $\beta$ =.232, p=.004) also predicted trauma symptomatology, such that non-Hispanic white women who reported more severe adult/adolescent sexual victimization, childhood emotional abuse and childhood sexual abuse reporting significantly more trauma symptomatology, and with non-Hispanic white women who reported more severe childhood abuse reporting significantly less trauma symptomatology. Slopes testing revealed no difference in the strength of the relationships between adult adolescent sexual victimization and trauma symptomatology (p=.98) or childhood emotional abuse and trauma symptomatology (p=.97) for Hispanic and non-Hispanic white women. No significant interactions were found in either Hispanic or Non-Hispanic white women. Table 12 summarizes the results of this regression analysis.

Physical health was regressed onto adult/adolescent victimization, childhood emotional, physical, or sexual abuse, religiosity, religiosity x adult/adolescent sexual victimization, religiosity x childhood emotional abuse, religiosity x childhood sexual abuse, and religiosity x childhood physical abuse. In Hispanic women, the model accounted for



38% of the variance,  $R^2$ =.375, F(9, 134)=8.32, p<.001. Childhood emotional abuse  $(\beta = .479, p < .001)$  significantly predicted somatic complaints, such that Hispanic women who reported more severe childhood emotional abuse also reported more somatic complaints. A significant interaction between childhood sexual abuse and religiosity  $(\beta = .479, p = .03)$  also was found. For Hispanic women at one standard deviation above the mean of religiosity, the relationship was significant ( $\beta$ =.169, p=.04), such that more religious women who had experienced more severe childhood sexual abuse also reported more somatic complaints. The simple slopes for this analysis are presented in Figure 9. For non-Hispanic white women, the model accounted for 28% of the variance,  $R^2$ =.284. F(9, 182) = 7.62, p < .001. Childhood emotional abuse ( $\beta = .489$ , p < .001) significantly predicted somatic complaints, such that non-Hispanic white women who reported more severe childhood emotional abuse also reported more somatic complaints. Additionally, more severe childhood sexual abuse ( $\beta$ =.229, p=.02) also predicted more somatic complaints for non-Hispanic white women. The interactions between religiosity and emotional abuse ( $\beta$ =.215, p=.02) and religiosity and physical abuse ( $\beta$ =-.305, p=.002) were significant. For Non-Hispanic white women at the mean ( $\beta$ =.382, p<.001) and one standard deviation above the mean ( $\beta$ =.589, p<.001) level of religiosity, the relationship was significant, such that non-Hispanic white women with mean or high levels of religiosity that had experienced more severe childhood emotional abuse also reported more somatic complaints. The simple slopes for this analysis are presented in Figure 10. A significant interaction was found for non-Hispanic white women between religiosity and childhood physical abuse, as well. For non-Hispanic white women at one standard deviation above the mean on religiosity, the relationship between somatic complaints and



childhood physical abuse ( $\beta$ =-.615, p<.001) was significant, such that non-Hispanic white women high on religiosity that had experienced more severe childhood physical abuse reported fewer somatic complaints. The simple slopes for this analysis are presented in Figure 11. Slopes testing revealed that the strength of the association between childhood emotional abuse and somatic complaints did not differ significantly for Hispanic and non-Hispanic white women (p=.93). Table 13 summarizes the results of this regression analysis.

General psychological distress was regressed onto adult/adolescent victimization, childhood emotional, physical, or sexual abuse, religiosity, religiosity x adult/adolescent sexual victimization, religiosity x childhood emotional abuse, religiosity x childhood sexual abuse, and religiosity x childhood physical abuse. For Hispanic women, the model accounted for 36% of the variance,  $R^2$ =.361, F(9,143)=8.42, p<.001. Only childhood emotional abuse ( $\beta$ =.516, p<.001) significantly predicted general psychological distress. For non-Hispanic white women, the model accounted for 28% of the variance,  $R^2$ =.284, F(9, 181)=7.58, p<.001. Childhood emotional abuse ( $\beta$ =.442, p<.001) also significantly predicted general psychological distress in non-Hispanic white women. Slopes testing revealed that the strength of the association between childhood emotional abuse and general psychological distress differed significantly between Hispanic and non-Hispanic white women (p<.001), such that emotionally abused Hispanic women experienced more trauma symptomatology than non-Hispanic white women. Childhood sexual abuse ( $\beta$ =.251, p=.004) also significantly predicted general psychological distress in non-Hispanic white women. Additionally, for Non-Hispanic white women, childhood physical abuse ( $\beta$ =-.207, p=.023) significantly predicted general



psychological distress, such that childhood physical abuse predicted less general psychological distress. No significant interaction effects were found for either Hispanic or non-Hispanic white women. Table 14 summarizes the results of this regression analysis.

Alcohol use was regressed onto adult/adolescent victimization, childhood emotional, physical, or sexual abuse, religiosity, religiosity x adult/adolescent sexual victimization, religiosity x childhood emotional abuse, religiosity x childhood sexual abuse, and religiosity x childhood physical abuse. For Hispanic women, the model was not significant,  $R^2$ =.118, F(9,119)=1.64, p=.112. For non-Hispanic white women, the model accounted for 16% of the variance,  $R^2$ =.155, F(9,151)=2.89, p=.004. Adult/adolescent sexual victimization predicted alcohol use ( $\beta$ =.261, p=.003), such that adult/adolescent sexual victimization predicted greater alcohol use. Additionally, religiosity also predicted alcohol use ( $\beta$ =-.226, p=.01), such that greater religiosity predicted less alcohol use in non-Hispanic white women. No significant interactions were found for either Hispanic or non-Hispanic white women. Overall, the hypothesis that greater religiosity would moderate negative outcomes positively was not supported. The exception to that was with non-Hispanic white women; non-Hispanic white women at high levels of religiosity that experienced more severe childhood physical abuse reported lower levels of somatic complaints. Table 15 summarizes the results of this regression analysis. *Hypothesis 4:* Higher levels of post-traumatic growth will moderate the association between victimization history (specifically, adult/adolescent sexual victimization) and negative mental and physical consequences experienced by women who have been victimized, such that women higher on posttraumatic growth would experience fewer



negative outcomes relative to women of similar levels of victimization severity that are lower in posttraumatic growth.

Trauma symptomatology was regressed onto adult/adolescent victimization, childhood emotional, sexual or physical abuse, posttraumatic growth, and posttraumatic growth x adult/adolescent sexual victimization. For Hispanic women, the model accounted for 50% of the variance,  $R^2$ =.498, F(6, 53)=7.79, p<.001. In Hispanic women, more severe childhood emotional abuse ( $\beta$ =.728, p<.001); significantly predicted greater trauma symptomatology. Additionally, for Hispanic women, a significant interaction between posttraumatic growth and adult/adolescent sexual victimization ( $\beta$ =-.263, p=.02), such that women low on posttraumatic growth who had experienced more severe adult/adolescent sexual victimization reported significantly greater trauma symptomatology ( $\beta$ =6.82, p=.03). The simple slopes for this analysis are presented in Figure 12.

With respect to non-Hispanic white women, the model accounted for 38% of the variance,  $R^2$ =.376, F(6,80)=7.44, p<.001. Similar to Hispanic women, childhood emotional abuse significantly predicted trauma symptomatology ( $\beta$ =.521, p<.001), such that non-Hispanic white women who were more severely emotionally abused reported greater trauma symptomatology. Slopes testing revealed that the strength of the relationship between childhood emotional abuse and trauma symptomatology did not differ significantly between Hispanic and non-Hispanic white women (p=.75). For non-Hispanic white women, a significant interaction was found between posttraumatic growth and adult/adolescent sexual victimization ( $\beta$ =-.454, p=.004). For non-Hispanic white women that were at one standard deviation above the mean in posttraumatic growth, the



relationship between adult/adolescent sexual victimization and trauma symptomatology was significant ( $\beta$ =-8.14, p=.007), such that women high on posttraumatic growth that experienced more severe adult/adolescent sexual victimization experienced lesser trauma symptomatology. The simple slopes for this analysis are presented in Figure 13. Table 16 summarizes the results of this regression analysis.

Physical health was regressed onto adult/adolescent victimization, childhood emotional, sexual or physical abuse, posttraumatic growth, and posttraumatic growth x adult/adolescent sexual victimization. For Hispanic women, the model accounted for 32% of the variance,  $R^2$ =.315, F(6, 51)=3.46, p=.007. Childhood emotional abuse significantly predicted somatic complaints for Hispanic women ( $\beta$ =.502, p=.005), such that Hispanic women who reported more severe childhood emotional abuse also reported more somatic complaints. For non-Hispanic white women, the model accounted for 25% of the variance,  $R^2$ =.248, F(6, 78)=3.95, p=.002. For non-Hispanic white women, more severe childhood emotional abuse significantly predicted greater somatic complaints  $(\beta=.409, p=.005)$ . Slopes testing revealed that the strength of the association between childhood emotional abuse and somatic complaints did not differ significant between Hispanic and non-Hispanic white women (p=.61). A significant interaction between posttraumatic growth and adult/adolescent sexual victimization also was found in non-Hispanic white women ( $\beta$ =-.358, p=.04). For non-Hispanic white women who were one standard deviation above the mean in posttraumatic growth, the relationship between adult/adolescent sexual victimization and physical health was significant ( $\beta$ =-1.61, p=.02), such that non-Hispanic white women who were high on posttraumatic growth who had experienced more severe adult/adolescent sexual victimization reported fewer



somatic complaints relative to women at mean or low levels of posttraumatic growth.

The simple slopes for this analysis are presented in Figure 14. Table 17 summarizes the results of this regression analysis.

General psychological distress was regressed onto adult/adolescent victimization, childhood emotional, sexual or physical abuse, posttraumatic growth, and posttraumatic growth x adult/adolescent sexual victimization. For Hispanic women, the model accounted for 52% of the variance,  $R^2$ =.522 F(6, 53)=8.56, p<.001. More severe childhood emotional abuse significantly predicted general psychological distress for Hispanic women ( $\beta$ =.714, p<.001), such that Hispanic women who reported more severe childhood emotional abuse also reported more somatic complaints. A significant interaction between posttraumatic growth and adult/adolescent sexual victimization ( $\beta$ =-.213, p=.04) also was found for Hispanic women. Upon further decomposing the interaction, there were no significant findings between general psychological distress and adult/adolescent sexual victimization among women who reported low, mean, or high levels of posttraumatic growth. The simple slopes are presented in Figure 15. For non-Hispanic white women, the model accounted for 31% of the variance,  $R^2$ =.313 F(6, 80)=5.61, p<.001. Childhood emotional abuse also significantly predicted general psychological distress ( $\beta$ =.396, p=.004), such that more severe emotional abuse predicted greater general psychological distress in non-Hispanic white women. Slopes testing revealed that the strength of the relationship between childhood emotional abuse and general psychological distress differed significantly (p<.001) between Hispanic and non-Hispanic white women, such that Hispanic women who experienced more severe childhood emotional abuse reported significantly more general psychological distress



than non-Hispanic white women. No significant interactions were present for non-Hispanic white women. Table 18 summarizes the results of this regression analysis. Alcohol use was regressed onto adult/adolescent victimization, childhood emotional, sexual or physical abuse, posttraumatic growth, and posttraumatic growth x adult/adolescent sexual victimization. The model was not significant for Hispanic women,  $R^2$ =.073, F(6, 48)=.554, p=.764. In non-Hispanic white women, the model accounted for 24% of the variance,  $R^2$ =.237, F(6,69)=3.27, p=.007. More severe adult/adolescent sexual victimization significantly predicted greater alcohol use ( $\beta$ =.323, p=.006), such that non-Hispanic white women who reported more severe adult/adolescent sexual victimization also reported greater alcohol use. The interaction between posttraumatic growth and adult/adolescent sexual victimization was not significant. Thus, Hypothesis 4 was partially supported. Table 19 summarizes the results of this regression analysis.

*Hypothesis 5:* Ethnically diverse women who have experienced victimization (as measured by adult/adolescent victimization and childhood trauma) will endorse differential coping strategies than non-Hispanic white women who also experienced similar levels of victimization severity.

Active coping was regressed onto adult/adolescent sexual victimization, and childhood emotional, sexual, and physical abuse. For Hispanic women, the model accounted for 11% of the variance,  $R^2$ =.112, F(4, 145)=4.46, p=.002. Childhood emotional abuse significantly predicted active coping ( $\beta$ =.388, p<.001). Additionally, childhood physical abuse ( $\beta$ =-.237, p=.02) predicted active coping, such that Hispanic women who experienced more physical abuse reported less active coping. In Non-Hispanic white



women, the model accounted for 7% of the variance,  $R^2$ =.070, F(4, 189)=3.49, p=.009. More severe childhood emotional abuse also significantly predicted active coping ( $\beta$ =.270, p=.004), such that non-Hispanic white women who reported more severe childhood emotional abuse also reported more active coping. Slopes testing revealed the association between childhood emotional abuse and active coping to be significantly different between Hispanic and non-Hispanic white women, such that Hispanic women who were emotionally abused were significantly higher on active coping (p=.00003). Table 20 summarizes the results of this regression analysis.

Coping through planning was regressed onto adult/adolescent sexual victimization, and childhood emotional, sexual, and physical abuse. For Hispanic women, the model accounted for 8% of the variance,  $R^2$ =.077, F(4, 144)=2.90, p=.024. In Hispanic women, adult/adolescent sexual victimization significantly predicted planning-based coping ( $\beta$ =.216, p=.014), such that Hispanic women who reported more severe adult/adolescent sexual victimization also reported more planning-based coping. The model was not significant for non-Hispanic white women,  $R^2$ =.022, F(4, 189)=1.02, p=.396. Table 21 summarizes the results of this regression analysis.

Coping through humor was regressed onto adult/adolescent sexual victimization, and childhood emotional, sexual, and physical abuse. For Hispanic women, the model accounted for 7% of the variance,  $R^2$ =.074, F(4, 145)=2.80, p=.028. For Hispanic women, adult/adolescent sexual victimization significantly predicted humor-based coping ( $\beta$ =.214, p=.015), such that Hispanic women who reported more severe adult/adolescent sexual victimization also reported more humor-based coping. The model was not



significant for non-Hispanic white women,  $R^2$ =.034, F(4, 189)=1.63, p=.168. Table 22 summarizes the results of this regression analysis.

Coping through acceptance was regressed onto adult/adolescent sexual victimization, and childhood emotional, sexual, and physical abuse. For Hispanic women, the model accounted for 9% of the variance,  $R^2$ =.086, F(4, 145)=3.34, p=.012. Childhood emotional abuse predicted coping through acceptance in Hispanic women ( $\beta$ =-.280, p=.008), such that women who had experienced more severe childhood emotional abuse reported less coping by acceptance. The model was not significant for non-Hispanic white women,  $R^2$ =.037, F(4, 189)=1.79, p=.133. Table 23 summarizes the results of this regression analysis.

Coping through positive reframing was regressed onto adult/adolescent sexual victimization, and childhood emotional, sexual, and physical abuse. For Hispanic women, the model accounted for 8% of the variance,  $R^2$ =.077, F(4, 145)=2.93, p=.023. Adult/adolescent sexual victimization predicted coping through positive reframing for Hispanic women ( $\beta$ =.273, p=.002), such that Hispanic women who reported more severe adult/adolescent sexual victimization reported more coping through positive reframing. For non-Hispanic white women, the model accounted for 6% of the variance,  $R^2$ =.058, F(4, 188)=2.83, p=.026. In non-Hispanic white women, childhood emotional abuse significantly predicted coping through positive reframing ( $\beta$ =.192, p=.044), such that non-Hispanic white women who reported more severe childhood emotional abuse also reported more coping through positive reframing. Childhood sexual abuse also significantly predicted coping through positive reframing ( $\beta$ =-.180, p=.032), such that non-Hispanic white women who reported more severe childhood sexual abuse reported



less coping through positive reframing. Thus, Hypothesis 5 was not supported. Table 24 summarizes the results of this regression analysis.

*Hypothesis 6:* Differential coping strategies may moderate negative outcomes among victimized women of differing ethnicities.

Because only active coping and emotional abuse were significant for both Hispanics and Non-Hispanic white women, the final exploratory analysis was limited to examining those relationships. With respect to the influence of active coping on the relationship between trauma symptomatology and emotional abuse, trauma symptomatology was regressed onto active coping, childhood emotional abuse, and active coping x childhood emotional abuse. In Hispanic women, the model accounted for 44% of the variance,  $R^2$ =.442, F(3, 147)=38.03, p<.001. Active coping ( $\beta$ =.352, p<.001) and childhood emotional abuse ( $\beta$ =.442, p<.001) both significantly predicted trauma symptomatology, such that Hispanic women who reported more active coping and more severe childhood emotional abuse also reported more trauma symptomatology. With respect to non-Hispanic white women, the model accounted for 34% of the variance,  $R^2$ =.340, F(3,194)=32.74, p<.001. In non-Hispanic white women, both active coping ( $\beta=.296$ , p<.001) and childhood emotional abuse ( $\beta$ =.414, p<.001) significantly predicted greater trauma symptomatology, such that women who reported more active coping and more severe childhood emotional abuse reported more trauma symptomatology. Slopes testing revealed that the strength of the associations between active coping (p=.96) and trauma symptomatology and childhood emotional abuse (p=.92) did not differ significantly between Hispanic and non-Hispanic white women. The interaction between active



coping and childhood emotional abuse was not significant for Hispanic or Non-Hispanic white women. Table 25 summarizes the results of this regression analysis.

With respect to the influence of active coping on the relationship between physical health and emotional abuse, physical health was regressed onto active coping, childhood emotional abuse, and active coping x childhood emotional abuse. For Hispanic women, the model accounted for 38% of the variance,  $R^2$ =.379, F(3, 137)=27.30, p<.001. In Hispanic women, active coping ( $\beta$ =.315, p<.001) and childhood emotional abuse  $(\beta = .427, p < .001)$  both significantly predicted somatic complaints, such that greater active coping and more severe emotional abuse predicted more somatic complaints. For non-Hispanic white women, the model accounted for 23% of the variance,  $R^2$ =.231,  $F(3, \frac{1}{2})$ 190)=18.77, p<.001. Similarly, in Non-Hispanic white women, both active coping  $(\beta=.181, p=.009)$  and childhood emotional abuse  $(\beta=.422, p<.001)$  both significantly predicted somatic complaints, such that women who reported more active coping and more severe childhood emotional abuse also reported more somatic complaints. Slopes testing revealed that the relationships between active coping and physical health (p=.72)and childhood emotional abuse and physical health (p=.95) did not differ significantly for Hispanic or non-Hispanic white women. The interaction between active coping and emotional abuse was not significant for either Hispanic or Non-Hispanic white women. Table 26 summarizes the results of this regression analysis.

With respect to the influence of active coping on the relationship between general psychological distress and emotional abuse, general psychological distress was regressed onto active coping, childhood emotional abuse, and active coping x childhood emotional abuse. The model accounted for 47% of the variance in Hispanic women,  $R^2$ =.469, F(3, 1)



147)=42.37, p<.001). For Hispanic women, active coping ( $\beta=.385$ , p<.001) and emotional abuse predicted general psychological distress ( $\beta$ =.397, p<.001), such that Hispanic women who reported more active coping and more severe childhood emotional abuse also reported greater general psychological distress. The interaction between active coping and childhood emotional abuse also was significant ( $\beta$ =.149, p=.021). Hispanic women with mean levels of active coping who experienced childhood emotional abuse reported significantly more general psychological distress ( $\beta$ =.048, p<.001), while there was no relationship between childhood emotional abuse and general psychological distress for Hispanic women with low levels of active coping. The simple slopes for this analysis are presented in Figure 16. In Non-Hispanic white women, the model accounted for 32% of the variance,  $R^2$ =.320, F(3, 191)=29.55, p<.001). Similarly to Hispanic women, active coping significantly predicted general psychological distress  $(\beta=.369, p<.001)$ , as well as childhood emotional abuse  $(\beta=.323, p<.001)$ , such that women who reported more more active coping and more severe childhood emotional abuse also reported greater general psychological distress. Slopes testing revealed that the relationship between active coping and general psychological distress (p=.71) did not differ significantly between Hispanic and non-Hispanic white women; however, the relationship between emotional abuse and general psychological distress did differ significantly between Hispanic and non-Hispanic white women (p<.001), such that the relationship between emotional abuse and trauma symptomatology was stronger for Hispanic women relative to non-Hispanic white women. Table 27 summarizes the results of this regression analysis.



Finally, with respect to the influence of active coping on the relationship between alcohol use and childhood emotional abuse, alcohol use was regressed onto active coping, childhood emotional abuse, and active coping x childhood emotional abuse. Neither model was significant (Hispanic women,  $R^2$ =.002, F(3, 121)=.079, p=.971; Non-Hispanic white women,  $R^2$ =.030, F(3, 160)=1.64, p=.183). Table 28 summarizes the results of this regression analysis. Thus, Hypothesis 6 was not supported.



## Chapter 4

#### Discussion

The focus of the current study was to examine consequences and protective factors for different types of victimization among ethnically diverse groups of women. To date, the vast majority of literature in this area has focused on the negative consequences of sexual assault for non-Hispanic white women. Thus, this work extends extant literature by including a large sample of Hispanic women. This study focused on factors that may protect women from the consequences of assault, which has been largely unexplored in the literature. Additionally, this study explored whether posttraumatic growth moderated the relationship between negative mental and physical health outcomes and sexual victimization, which is an extension of the existing literature. Additionally, we explored the influence of acculturation as a protective factor, which resulted in complex findings. Religiosity also was explored as a potentially protective factor; this, too, had mixed findings with interesting clinical implications. These findings, and their implications, will be summarized below.

# **Negative Outcomes**

Adult/adolescent sexual victimization predicted trauma symptoms for both Hispanic and Non-Hispanic white women. This replicated prior findings showing that adult/adolescent sexual victimization is related to traumatic symptomatology (Bryant-Davis et al, 2009; Simoni et al, 2004). Research has shown consistently that adult/adolescent sexual victimization is related to a number of negative outcomes (e.g., Hart-Johnson & Green, 2012). Surprisingly, for Non-Hispanic white women, but not for Hispanic women, childhood sexual abuse predicted trauma symptomatology. Even more surprisingly, for



non-Hispanic white women, childhood physical abuse was predictive of *less* trauma symptomatology. The fact that non-Hispanic white women who experienced childhood sexual abuse experienced more trauma symptomatology relative to Hispanic women is of particular interest, though, as it may indicate certain factors protect Hispanic women from increased trauma symptomatology. These factors are not clear at this point; however, research has shown that less enculturated women are less likely to experience extreme anger or PTSD post-assault (Cuevas et al, 2012). The mechanisms responsible for those outcomes is not clear at this point. One potential explanation is that of social support—increased social support may ameliorate negative outcomes. Another potential explanation is that abuse may be more highly stigmatizing in non-Hispanic white cultures. Future research is necessary to explore these possibilities.

With respect to somatic complaints, adult/adolescent victimization, childhood sexual abuse and childhood physical abuse did not predict elevated somatic complaints in either Hispanics or Non-Hispanic white women. In fact, only childhood emotional abuse predicted somatic complaints for both Hispanics and Non-Hispanic white women. No ethnic differences were found with respect to somatization. Of particular interest is that adult/adolescent sexual victimization was not related to somatic complaints, as women who have been victimized often report not only poorer perceptions of their own health, but also more health problems in general (Kapur & Windish, 2011; Kimerling & Calhoun, 1994). Given that emotional abuse suffered in childhood was related to somatic complaints for both Hispanic and non-Hispanic white women, interventions for women who have experienced this may be of particular use. Individuals who suffer these sorts of experiences may, understandably, have issues with trusting others and forming healthy



relationships (Lawson, Davis, & Brandon 2013). These individuals may also show deficits with emotion regulation and have interpersonal difficulties (Cloitre, Stovall-McClough, Miranda & Chemtob, 2004). Additionally, childhood emotional abuse has been shown to predict borderline personality features in adults, with particular support for the emotion dysregulation component (Igarashi, Hasui, Uji, Shono, Nagato, & Kitamura, 2010). Interventions to address the distress caused by emotional abuse may include motivational enhancement to help individuals stay motivated and engaged with therapy that may in turn, address negative and dysfunctional behaviors learned from an abusive background. Additionally, Dialectical Behavior Therapy (DBT) may help aid individuals with severe dysregulation, as well (Igarashi et al, 2010). Additionally, childhood emotional abuse has been linked to depression and increased suicidality in adults (Tunnard, Rane, Wooderson, Markopoulou, Poon, Fekadu, Juruena, & Cleare, 2014), so interventions designed to address depression and suicidality such as behavioral activation, DBT, and mindfulness-based cognitive therapy (McEvoy, Law, Bates, Hilton, & Mansell, 2013; Lovell, 2005; Williams, Crane, Barnhofer, Brennan, Duggan, Fennell et al, 2014) may be of particular use.

Similarly with general psychological distress, childhood emotional abuse predicted greater general psychological distress for both Hispanic and Non-Hispanic white women. Emotional abuse involves hearing hurtful and insulting things (being called ugly and lazy by a parent or a caregiver, for example) and has been shown to negatively affect closeness with family members both in middle-age and in advanced age (Savla, Roberto, Jaramillo-Sierra, Gambrel, Karimi & Butner, 2013). However, the same is not the case for physical abuse (Savla et al, 2013). This indicates that emotional abuse may have a



experienced emotional abuse may have difficulty trusting people, the therapeutic alliance may be of particular importance (Lawson et al, 2013). This may again illustrate the need for interventions for women who have experienced this particular form of victimization. Appropriate interventions may address skills deficits or self-esteem deficits, or they again, may benefit from communication skills training or interventions designed to address the dysregulation and negative affect they may be experiencing (Lovell et al, 2005). Suffering emotional abuse during childhood appears to be related to multiple negative outcomes for both Hispanic and Non-Hispanic white women.

For both Hispanic and Non-Hispanic white women, adult/adolescent sexual victimization was related to greater alcohol use. This is consistent with prior literature linking sexual victimization to elevated alcohol use (Kapur & Windish, 2011; Testa & Hoffman, 2012). Additionally, once victimized, women are at elevated risk for revictimization (Testa, Hoffman, & Livingston, 2010; Koss et al 1987; Messman-Moore & Brown, 2006).

particularly detrimental and lasting effect. Additionally, given that individuals who have

Given the robust link between alcohol and victimization, and subsequently, victimization to revictimization, this has critical implications for prevention. Interventions to reduce risky alcohol consumption behaviors, especially in college women, may be particularly important here. Childhood abuse was not related to elevated alcohol use in either Hispanic or Non-Hispanic white women. Overall, there was not support for the hypothesis that Hispanic women would be more adversely affected by a traumatic history than non-Hispanic white women.

### **Protective Factors**

### Acculturation



For Hispanic women, having perceived instances of discrimination were related to negative outcomes. Perceived discrimination (feeling that one's ethnic group is disrespected, experiencing prejudice, and having to defend one's ethnic group from others) was related to increased trauma symptomatology, somatic complaints and general distress in Hispanic women. Additionally, upon decomposing the interactions between physical abuse and perceived discrimination, some interesting findings emerged. For Hispanic women who had experienced physical abuse, women at low levels of perceived discrimination reported significantly less trauma symptomatology, fewer somatic complaints, and less general psychological distress. Additionally, Hispanic women who reported a high level of mainstream comfort and who had experienced adult/adolescent sexual victimization reported more somatic complaints. This finding provides support for the theory that less enculturated women may be protected against some of the negative consequences of sexual victimization (Cuevas et al, 2012). However, it is important to note that this potentially protective factor may not necessarily generalize to multiple forms of victimization. For example, Hispanic women who experienced emotionally abusive childhoods that were either low or mean level of mainstream comfort also reported more somatic complaints. This finding points to two potential conclusions. First, the need for interventions for childhood emotional abuse is illustrated, and secondly, that factors that may be protective for one type of victimization may not be protective across multiple types of victimization.

## Religiosity

Religiosity was primarily related to somatic complaints. Hispanic women high on religiosity who had experienced adult/adolescent sexual victimization reported more



somatic complaints. For non-Hispanic white women who experienced childhood emotional abuse, those who also reported mean or high levels of religiosity also reported increased somatic complaints. For non-Hispanic white women who experienced childhood physical abuse, higher religiosity predicted fewer somatic complaints. This provides a complicated picture of the role that religiosity may play as a protective factor. Religiosity does not appear to be a protective factor against negative outcomes for individuals who have experienced adult/adolescent sexual victimization. This could potentially be due to the isolating and stigmatizing nature of sexual victimization. Another potential explanation is that women that are part of highly religious communities could experience guilt or shame regarding sexual behavior and activity, particularly if the perpetrator was known to the victim, or if they drank alcohol or participated in some type of consensual sexual behavior during the event. However, it does appear to play a protective role in individuals who experienced childhood physical abuse. This could be due to a number of factors, but one potential explanation may be that Non-Hispanic white women who experience childhood physical abuse may turn to religion as a means of comfort, which may in turn lead to decreased somatic complaints. Additionally, victims of physical abuse may be less inclined to experience self-blame or blame by others in the same manner that victims of sexual assault often do. Thus, victims of child abuse may not suffer feelings of shame that may in turn predict worsened outcomes. Future research is needed to fully understand how religiosity and the consequences of victimization are related. One more potential issue to consider is that of cultural competence. If Hispanic women present with more somatic complaints as a result of victimization, it would be of critical importance for the intervention to address that, particularly if that same



relationship is not found in non-Hispanic white women. In particular, therapists and clinicians should be alerted to the fact that symptoms of distress may be different between cultural groups. Particular care should be taken not to further stigmatize ethnically diverse women who may express distress in different ways than non-Hispanic white women.

### **Posttraumatic Growth**

With respect to trauma symptomatology, complementary findings emerged with respect to Hispanic and Non-Hispanic white women. Hispanic women who had experienced adult/adolescent sexual victimization that were low on posttraumatic growth experienced more traumatic symptomatology. Non-Hispanic white women who had experienced adult/adolescent sexual victimization who were high on posttraumatic growth reported lesser trauma symptomatology. These findings indicate that for both Hispanics and Non-Hispanic white women, posttraumatic growth is related to reduced trauma symptomatology and that interventions specifically targeting goals such as relating to others or new possibilities, or interventions such as mindfulness-based cognitive therapy (Mc Evoy et al, 2013) may be of use to some women. Interventions that foster skills such as personal strength and gratitude for one's life may map onto interventions such as mindfulness based stress reduction (Chiesa & Serretti, 2011), Cognitive Processing Therapy (Williams, Galovski, Kattar & Resick, 2011), or Acceptance and Commitment Therapy (McCracken & Vowles, 2014). Additionally, for Non-Hispanic white women that experienced adult/adolescent sexual victimization, higher levels of posttraumatic growth were related to fewer somatic complaints. This may have promising implications



for the role that posttraumatic growth may play in helping survivors of sexual victimization move on from their experience.

# Coping

The only commonalities between Hispanics and Non-Hispanic white women with respect to coping and victimization were active coping and emotional abuse. For both Hispanic and Non-Hispanic white women, more active coping predicted greater general psychological distress. This could indicate that particularly distressed women are more motivated to take action to ameliorate the negative affect they are experiencing. However, follow-up analyses to decompose the interaction revealed this not to be the case: emotionally abused Hispanic women who reported mean levels of active coping also reported more general psychological distress. No significant relationships were found at low or high levels of active coping. One possibility is that more active coping could be indicative of a tendency to ruminate or avoid the traumatic content, rather than taking productive steps toward processing emotional responses to the traumatic event. However, as these analyses were exploratory, care should be taken before interpreting these findings. Follow-up studies could potentially further test women at high levels of active coping to investigate whether differences truly exist. If women who are at a mean level of active coping report more general psychological distress, but women who are at high levels do not, interventions in the form of teaching coping active coping skills, such as concentrating one's efforts into actions to improve the situation, rather than concentrating on potentially unhelpful solutions (such as how the incident could have been avoided) could potentially be useful.

### Limitations



This study had several limitations. Most notably, while online data collection does have marked benefits and advantages, questions of generalizability may still remain. Because online research is still in its nascence, it is not yet clear whether or not individuals who participate in online research differ from individuals who do not. It is possible that there are confounding variables at play here; for example, individuals who participate in online research are more ostensibly more likely to have personal computers, laptops, smartphones, etc. This may speak to increased socioeconomic status, which in turn, is related to better outcomes (Carpenter-Song et al, 2011). Similarly, minorities are more likely to live in poverty, and thus, have reduced online access. Impoverished minority women are individuals most likely to be negatively affected by victimization (Bryant-Davis et al, 2009). It is possible that this type of data collection does not reach individuals who could most benefit from answers to these questions. Another possible confounding variable is that individuals who are less distressed may be more likely to participate in research.

Similarly, another potential issue with generalizability is that of attrition. Substantially more women (n=733) began the survey than completed it, with roughly 65.8% of respondents completing the study. Level of attrition was lower than for other published studies (Heiervang, 2011; Henderson, Evans-Lacko, Flach, & Thornicroft, 2011), however, that is still a large portion of women who did not complete the study. Many issues could contribute to respondents choosing not to complete it—boredom, distraction, or forgetting. However, one possibility is that participants may have become uncomfortable with the subject matter and elected not to continue. If participants who



complete the survey are in some way different than participants who chose not to do so, that presents a problem with interpreting online research.

Thirdly, participants were not specifically queried about whether they were college students or community members. Due to the fact that recruitment included both community members and college students, and the fact that the survey was widely disseminated to UNM students, we can assume that a substantial portion of respondents were college students. Thus, this study may have relied more heavily on college students than was the original aim. However, as college students are at particular risk for victimization, the present study still provides valuable information that could be of use for college women.

### **Future Directions**

Despite some potential limitations, findings from this study still provide valuable information about ethnically diverse women, victimization, and factors that may protect women from worsened outcomes subsequent to victimization. With respect to protective factors, posttraumatic growth has potentially promising implications. If women who are victimized are able to move on from their experiences and look back on it as a potential source of growth, the feelings of resultant empowerment could be life-affirming and validating. The relationship between acculturation and victimization was also an interesting one, which may yield further interesting research questions. If lowered mainstream comfort is protective against certain negative outcomes, this may point to less enculturated women possessing unique strengths and resources which may in turn help them recover from victimization without experiencing worsened outcomes. As



acculturation is a highly complex construct, future study is warranted to investigate what role it plays in the aftermath of victimization.

Another avenue for future study is to focus recruitment on community samples. Women who are not enrolled in college may provide different information than a sample largely comprised of college students. College and community samples have been shown to have different patterns of response to questionnaires (McCabe, Krauss, & Lieberman, 2010). Another point to consider is that women who are most symptomatic subsequent to victimization may be thus precluded from going to school if levels of distress or pathology are debilitating enough. This is still a largely unexplored area of research that is overdue for investigation. In that vein, if recruiting solely from the community, perhaps different data collection methods might yield interesting results. With respect to women who are less enculturated, focus groups or interviews could potentially yield invaluably rich information on the experiences this population has. This format might foster an atmosphere of safe disclosure, where women may be more inclined to disclose information about their experiences with victimization, their ethnic identity, and their strategies for moving forward with their lives after victimization.

Though the findings from this study are plentiful and rich, sexual assault continues to be a major public health concern. This study examined ethnicity, negative outcomes, and protective factors. Understanding more about the relationship between negative outcomes and the factors that protect women from them could inform interventions that could make a substantial difference in the quality of life for victimized women.



Appendix A

**Study Questions** 



Demographics Questionnaire	
INSTRUCTIONS: For each of the	
questions below, either fill in the blank or	
place an "X" in the appropriate box.	
1. Age	2. Biological Sex
	[ ] Male
	[ ] Female
3. Gender	4. Marital Status
[ ] Male	[ ] Single (NOT MARRIED)
[ ] Female	[ ] Divorced
[ ] Other	[ ] Married
	[ ] Living Together
	[ ] Separated
5.0.10:	[ ] Widowed
5. Sexual Orientation	6. Race
[ ] Heterosexual	Asian/Pacific Islander
Homosexual	Non-Hispanic White/Non-Hispanic White
Bisexual	African American
	[ ] American Indian/Alaskan Native
	[ ] Hispanic/Latina
	[ ] Other
9. If you are still living with your family,	10. If you are no longer living with your paren
please estimate your family's combined	please estimate your yearly income.
yearly	
income.	[ ] 0-14,999
5 7 0 4 4 0 0 0	[] 15,000-29,999
[]0-14,999	[ ] 30,000-44,999
[ ] 15,000-29,999 [ ] 30,000-44,999	[ ] 45,000-59,000 [ ] 60,000-74,999
[ ] 45,000-59,000	[ ] 75,000-74,999
[ ] 60,000-74,999	[ ] 90,000+
[ ] 75,000-89,999	[ ] I still live with my family.
[ ] 90,000+	[ ] I some take with the same and
[ ] I no longer live with my family.	
11. What is your employment status?	



[ ] Part-time	
[ ] Student	
[ ] Paid internship	
[ ] Unpaid internship	
[ ] Unemployed	



Please answer the following questions about your childhood, by circling a number to indicate how true each description was of your experience when you were growing up.

# "WHEN I WAS GROWING UP..."

WHEN I WAS GROWING UF		Neve	r true		Very often true			
1	I didn't have enough to eat	0	1	2	3	4	5	
2	I knew that there was someone to take care of me and protect me	0	1	2	3	4	5	
3	People in my family called me things like "stupid," "lazy," or "ugly"	0	1	2	3	4	5	
4	My parents were too drunk or high to take care of the family	0	1	2	3	4	5	
5	There was someone in my family who helped me feel that I was important or special	0	1	2	3	4	5	
6	I had to wear dirty clothes	0	1	2	3	4	5	
7	I felt loved	0	1	2	3	4	5	
8	I thought that my parents wished I had never been born	0	1	2	3	4	5	
9	I got hit so hard by someone in my family that I had to see a doctor or go to the hospital	0	1	2	3	4	5	
10	There was nothing I wanted to change about my family	0	1	2	3	4	5	
11	People in my family hit me so hard that it left me with bruises or marks	0	1	2	3	4	5	
12	I was punished with a belt, a board, a cord, or some other hard objects	0	1	2	3	4	5	
13	People in my family looked out for each other	0	1	2	3	4	5	
14	People in my family said hurtful or insulting things to me	0	1	2	3	4	5	
15	I believe that I was physically abused	0	1	2	3	4	5	



16	I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor	0	1	2	3	4	5
18	I felt that someone in my family hated me	0	1	2	3	4	5
19	People in my family felt close to each other	0	1	2	3	4	5
20	I had the best family in the world	0	1	2	3	4	5
21	Someone tried to touch me in a sexual way or tried to make me touch them	0	1	2	3	4	5
22	Someone threatened to hurt me or tell lies about me unless I did something sexual with them	0	1	2	3	4	5
23	Someone tried to make me do sexual things or watch sexual things	0	1	2	3	4	5
24	Someone molested me	0	1	2	3	4	5
25	I believe that I was emotionally abused	0	1	2	3	4	5
26	There was someone to take me to the doctor if I needed it	0	1	2	3	4	5
27	I believe that I was sexually abused	0	1	2	3	4	5
28	My family was a source of strength and support	0	1	2	3	4	5



INSTRUCTIONS: Please place an "\sqrt{"}" or fill in the blank for each of the following question Please read each question carefully. The following questions are ONLY about sexual experiences you may have had SINCE YOU WERE FOURTEEN YEARS OLD.

2. Have you ever had sex play (fondling,

1. Have you ever given in to sex play

(fondling, kissing, or petting, but <u>not</u> intercourse) when you didn't want to because you were overwhelmed by a man's continual arguments and pressure? (Since you were fourteen)	authority (boss, teacher, camp counselor,
[ ] No (If no, skip directly to question #2) [ ] Yes	[ ] No (If no, skip directly to question #3) [ ] Yes
How many times have you had this experience since you were fourteen years old?	How many times have you had this experience since you were fourteen years old?
[ ] 1 [ ] 2-4 [ ] 5-7 [ ] 8-10 [ ] 11 or more	[ ] 1
When did this occur? (If you cannot remember the exact date, please estimate).	When did this occur? (If you cannot remember the exact date, please estimate).
MonthYear	Month Day Vear

- 3. Have you had sex play (fondling, kissing, 4. Have you given in to sexual intercourse petting, but not intercourse) when you didn't
  - when you didn't want to because you were overwhelmed by a man's continual argument



want	or pressure? (Since you were fourteen)				
to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.)? (Since you were fourteen)	[ ] No (If no, skip directly to question #5) [ ] Yes				
[ ] No (If no, skip directly to question #4)					
[ ] Yes	How many times have you had this experience since you were fourteen years old?				
How many times have you had this experience since you were fourteen years old?  [ ] 1	[ ] 1				
[ ] 8-10 [ ] 11 or more	When did this occur? (If you cannot remember the exact date, please estimate).				
When did this occur? (If you cannot remember the exact date, please estimate).	MonthDayYear				
MonthDayYear					
5. Have you had sexual intercourse when you didn't want to because a man used his position of	-				
authority (boss, teacher, counselor, supervisor)?	you didn't want to by threatening or using some degree of force (twisting your arm, holding you down, etc.)				
(Since you were fourteen)	but intercourse did <u>not</u> occur? ( <b>Since you we fourteen</b> )				



			[ ] No ( <b>If no</b>	, skip directly to q	uestion #7)		
[ ] No ( <b>If no.</b>	skip directly to qu	estion #6)	[ ] Yes				
	simp directly to qu		[ ] 105				
[ ] Yes							
				nes have you had the			
How many tim	es have you had this	s experienc	since you were fourteen years old?				
since you were	fourteen years old?	•	[]1 []2-4 []				
			[ ]1	[ ] 2-4	[ ] 5-7		
[ ]1	[ ] 2-4	[ ]57	[ ] & 10	[ ] 11 or more			
	[ ] <del>2-4</del>	[ ] 3-1	[ ] 6-10	[ ] II of filore			
[ ] 8-10	[ ] 11 or more						
			When did this	occur? (If you cann	ot rememb		
When did this	occur? (If you comm	at mana amb	the exact date, please estimate).				
	occur? (If you canno please estimate).	ot rememo					
and ortale date,	prouse estimate).			_			
			Month	Day	_Year		
Month	Day	Year					
	d a man attempt sex	kual	-	ad sexual intercours because a man gave	-		
intercourse				ce you were fourte	-		
	you and insert his pe	=					
giving you alco	ohol or drugs, but in	tercourse (					



not occur?	[ ] No (If no, skip directly to question #9)				
(Since you were fourteen)	[ ] Yes				
[ ] No (If no, skip directly to question #8) [ ] Yes	) How many times have you had this experience since you were fourteen years old?				
How many times have you had this experience since you were fourteen years old?					
[ ] 1	When did this occur? (If you cannot remember the exact date, please estimate).				
When did this occur? (If you cannot remember the exact date, please estimate).	MonthDayYear				
MonthDayYear					
9. Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you? (Since you were fourteen)  [ ] No (If no, skip directly to question #10 [ ] Yes	intercourse or penetration by objects other than the penis) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding yo down, etc.)? (Since you were fourteen)  [ ] No				
How many times have you had this experience	How many times have you had this experience since you were fourteen years old?				



since you were	e fourteen years old	1?			
			[ ]1	[ ] 2-4	[ ] 5-7
[ ]1	[ ] 2-4	[ ] 5-7	[ ] 8-10	[ ] 11 or more	
[ ] 8-10	[ ] 11 or more				
			When did this	occur? (If you can	not rememb
When did this	occur? (If you can	not rememb	the exact date,	please estimate).	
	please estimate).				
			Month	Day	_Year
Month	Day	Year			

	ictions: Please circle the number that correspondenced the following in the past month.	nds to h	ow often	you have				
скреі	Never							
Ofter	1							
1	Headaches	0	1	2	3			
2	Insomnia (trouble getting to sleep)	0	1	2	3			
3	Weight loss (without dieting)	0	1	2	3			
4	Stomach problems	0	1	2	3			
5	Sexual problems	0	1	2	3			
6	Feeling isolated from others	0	1	2	3			
7	"Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3			
8	Restless sleep	0	1	2	3			
9	Low sex drive	0	1	2	3			
10	Anxiety attacks	0	1	2	3			
11	Sexual overactivity	0	1	2	3			
12	Loneliness	0	1	2	3			
13	Nightmares	0	1	2	3			
14	"Spacing out" (going away in your mind)	0	1	2	3			
15	Sadness	0	1	2	3			
16	Dizziness	0	1	2	3			
17	Not feeling satisfied with your sex life	0	1	2	3			
18	Trouble controlling your emotions	0	1	2	3			
19	Waking up early in the morning and	0	1	2	3			
20	Can't get back to sleep Uncontrollable crying	0	1	2	3			



			1.	1 -	Τ _
21	Fear of men	0	1	2	3
22	Not feeling rested in the morning	0	1	2	3
23	Having sex that you didn't enjoy	0	1	2	3
24	Trouble getting along with others	0	1	2	3
25	Memory problems	0	1	2	3
26	Desire to physically hurt yourself	0	1	2	3
27	Fear of women	0	1	2	3
28	Waking up in the middle of the night	0	1	2	3
29	Bad thoughts or feelings during sex	0	1	2	3
30	Passing out	0	1	2	3
31	Feeling that things are "unreal"	0	1	2	3
32	Unnecessary or over-frequent washing	0	1	2	3
33	Feelings of inferiority	0	1	2	3
34	Feeling tense all the time	0	1	2	3
35	Being confused about your sexual feelings	0	1	2	3
36	Desire to physically hurt others	0	1	2	3
37	Feelings of guilt	0	1	2	3
38	Feelings that you are not always in your body	0	1	2	3
39	Having trouble breathing	0	1	2	3
40	Sexual feelings when you shouldn't have them	0	1	2	3



Indic	ate below how bothered you are by the following syn	nptoms on	a daily ba	asis.
0= N	ot bothered at all 1= A little bothered 2= bothered a	lot		
1	Stomach pain	0	1	2
2	Back pain	0	1	2
3	Pain in your arms, legs, or joints	0	1	2
4	Menstrual cramps or other problems with your periods (women only)	0	1	2
5	Headaches	0	1	2
6	Chest pain	0	1	2
7	Dizziness	0	1	2
8	Fainting spells	0	1	2
9	Feeling your heart pound or race	0	1	2
10	Shortness of breath	0	1	2
11	Pain or problems during sexual intercourse	0	1	2
12	Constipation, loose bowels, or diarrhea	0	1	2
13	Nausea, gas, or indigestion	0	1	2
14	Feeling tired or having low energy	0	1	2
15	Trouble sleeping	0	1	2



How often do you have a drink containing alcohol?	Never (0)	Monthly or Less (1)	Two to four times a month (2)	Two to three times a week (3)	Four or more times a week (4)	Total:
How many drinks containing alcohol do you have on a typical day when you're drinking?	Never (0)	Monthly or Less (1)	Two to four times a month (2)	Two to three times a week (3)	Four or more times a week (4)	Total:
How often do you have 6 or more drinks on one occasion?	Never (0)	Monthly or Less (1)	Two to four times a month (2)	Two to three times a week (3)	Four or more times a week (4)	Total:

Instructions: The following is a list of problems people sometimes have. Read each one carefully and circle one number that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem. Do not skip any items. If you change your mind, erase your first mark carefully and then circle your new choice. If you have any questions, please ask them now.

0 = Not at all 1 = A little bit 2 = Somewhat 3 = Quite a bit 4 = Extremely

### HOW MUCH WERE YOU DISTRESSED IN THE PAST 7 DAYS BY:

Headaches	0	1	2	3	4
Nervousness or shakiness inside	0	1	2	3	4
Repeated unpleasant thoughts that won't leave your mind	0	1	2	3	4
Faintness or dizziness	0	1	2	3	4
Loss of sexual interest or pleasure	0	1	2	3	4
Feeling critical of others	0	1	2	3	4
The idea that someone else can control your thoughts	0	1	2	3	4
Feeling others are to blame for most of your troubles	0	1	2	3	4
Trouble remembering things	0	1	2	3	4
Worried about sloppiness or carelessness	0	1	2	3	4
Feeling easily annoyed or irritated	0	1	2	3	4
Pains in heart or chest	0	1	2	3	4
Feeling afraid in open spaces or on the streets	0	1	2	3	4
Feeling low in energy or slowed down	0	1	2	3	4
Thoughts of ending your life	0	1	2	3	4
Hearing voices that other people do not hear	0	1	2	3	4
Trembling	0	1	2	3	4
Feeling that most people cannot be trusted	0	1	2	3	4
Poor appetite	0	1	2	3	4
		•	•	•	•



[ ·	1.	1 .	T	1 -	
Crying easily	0	1	2	3	4
Feeling shy or uneasy with the opposite sex	0	1	2	3	4
Feelings of being trapped or caught	0	1	2	3	4
Suddenly scared for no reason	0	1	2	3	4
Temper outbursts that you could not control	0	1	2	3	4
Feeling afraid to go out of your house alone	0	1	2	3	4
Blaming yourself for things	0	1	2	3	4
Pains in lower back	0	1	2	3	4
Feeling blocked in getting things done	0	1	2	3	4
Feeling lonely	0	1	2	3	4
Feeling blue	0	1	2	3	4
Worrying too much about things	0	1	2	3	4
Feeling no interest in things	0	1	2	3	4
Feeling no interest in things	0	1	2	3	4
Feeling fearful	0	1	2	3	4
Your feelings being easily hurt	0	1	2	3	4
Other people being aware of your private thoughts	0	1	2	3	4
Feeling others do not understand you or are unsympathetic	0	1	2	3	4
Feeling that people are unfriendly or dislike you	0	1	2	3	4
Having to do things very slowly to insure correctness	0	1	2	3	4
Heart pounding or racing	0	1	2	3	4
Nausea or upset stomach	0	1	2	3	4
Feeling inferior to others	0	1	2	3	4
Soreness of your muscles	0	1	2	3	4
Feeling that you are watched or talked about by others	0	1	2	3	4
Trouble falling asleep	0	1	2	3	4
	1	1	1		1



0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
0	1	2	3	4
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0       1         0       1	0       1       2         0       1       2	0       1       2       3         0       <



Feeling everything is an effort	0	1	2	3	4
Spells of terror or panic	0	1	2	3	4
Feeling uncomfortable about eating or drinking in public	0	1	2	3	4
Getting into frequent arguments	0	1	2	3	4
Feeling nervous when you are left alone	0	1	2	3	4
Others not giving you proper credit for your achievements	0	1	2	3	4
Feeling lonely even when you are with people	0	1	2	3	4
Feeling so restless that you couldn't sit still	0	1	2	3	4
Feelings of worthlessness	0	1	2	3	4
The feeling that something bad is going to happen to you	0	1	2	3	4
Shouting or throwing things	0	1	2	3	4
Feeling afraid you will faint in public	0	1	2	3	4
Feeling that people will take advantage of you if you let them	0	1	2	3	4
Having thoughts about sex that bother you a lot	0	1	2	3	4
The idea that you should be punished for your sins	0	1	2	3	4
Thoughts and images of a frightening nature	0	1	2	3	4
The idea that something serious is wrong with your body	0	1	2	3	4
Never feeling close to another person	0	1	2	3	4
Feelings of guilt	0	1	2	3	4
The idea that something is wrong with your mind	0	1	2	3	4



Every individual belongs to at least one ethnic group. Some commonly used names of ethnic groups are Asian, Latino, Non-Hispanic White, etc., while more *specific* examples are African-American, Chinese-American, Italian-American, Native-American and Mexican-American or Chinese, Italian, Mexican, etc. The following items ask you to identify how you feel about your specific ethnic group(s). Read each item and indicate how much you agree or disagree with the statement.

- 1=Strongly Agree
- 2=Agree
- 3=Neither
- 4=Disagree
- 5=Strongly Disagree

Holidays related to my ethnicity are not very important to	1	2	3	4	5
me.					
Generally speaking, my ethnic group is respected in America.	1	2	3	4	5
My ethnic group has been treated well in American society.	1	2	3	4	5
Ethnicity was not important to my parents.	1	2	3	4	5
At a social gathering, I would feel most comfortable if the majority of the people were members of my own ethnic group.	1	2	3	4	5
I feel like I belong to mainstream American culture.	1	2	3	4	5
My ethnic background plays a very small role in how I live my life.	1	2	3	4	5
I do not feel it is necessary to learn about the history of my ethnic group.	1	2	3	4	5
I'm what most people think of as a typical American.	1	2	3	4	5
I feel most comfortable talking about personal things with people from my own ethnic group.	1	2	3	4	5
I do not feel a part of mainstream American culture.	1	2	3	4	5
Ethnic pride is not very important to a child's upbringing.	1	2	3	4	5
My ethnic group does not have the same opportunities as other ethnic groups.	1	2	3	4	5
I have a strong sense of myself as a member of my ethnic group.	1	2	3	4	5
I think that friendships work best when people are from the same ethnic group.	1	2	3	4	5



I believe that my sense of ethnicity was strongly influenced	1	2	3	4	5
by my parents.					
I think of myself as a typical American.	1	2	3	4	5
I find it easiest to trust people from my own ethnic group.	1	2	3	4	5
I often have to defend my ethnic group from criticism by people outside of my ethnic group.	1	2	3	4	5
Being a part of my ethnic group is an important part of who I am.	1	2	3	4	5
Discrimination against my ethnic group is not a problem in America.	1	2	3	4	5
I prefer my close friends to be from my own ethnic group.	1	2	3	4	5
My parents gave me a strong sense of cultural values.	1	2	3	4	5
My ethnic group is often criticized in this country.	1	2	3	4	5
I believe that it is important to take part holidays that celebrate my ethnic group.	1	2	3	4	5
In America, the opinions of people from my ethnic group are treated as less important than those of other ethnic groups.	1	2	3	4	5
When I was growing up, ethnicity played a very little part in our family life.	1	2	3	4	5
I understand how to get along well in mainstream America.	1	2	3	4	5
In my life, I have experienced prejudice because of my ethnicity.	1	2	3	4	5
I have taken time to learn about the history of my ethnic group.	1	2	3	4	5
I have not felt prejudiced against in American society because of my ethnic background.	1	2	3	4	5
The term "American" does not fit me.	1	2	3	4	5



Which of the following describes you best today?
Atheist—I do not believe in God
Agnostic—I believe we can't really be sure about the existence of God.
Unsure—I don't know what to believe about God.
Spiritual—I believe in God but I am not religious
Religious—I believe in God and I practice a religion.
If you practice a particular religion, what is your religious denomination?

			_		_			_
DURING	Never	Rarely	Once a	Twice	Once a	Twice	Almost	Once a
THE PAST			Month	a	Week	a	Daily	Day or
THREE				Month		Week		More
MONTHS:								
I thought								
about God								
I prayed								
I meditated								
I attended								
religious								
services								
I read or								
studied								
holy								
writings								
I had direct								
experiences								
of God								



Instructions: Indicate the extent to which you do each of the following when trying to cope with stress. Circle one number for each statement. 0 = I don't do this at all 1 = I do this a little bit 2 = I do some 3 = I do this a lot I take action to try to make the situation better. I give up the attempt to cope. I criticize myself. I think hard about what steps to take. I try to find comfort in my religion or spiritual beliefs. I give up trying to deal with it. I refuse to believe that it has happened. I use alcohol or other drugs to make myself feel better. I pray or meditate. I blame myself for things that happened. I try to come up with a strategy about what to do. I express my negative feelings. I use alcohol or other drugs to help me get through it. I get emotional support from others. I take time to figure out what I'm really feelings. I accept the reality of the fact that it has happened. I make fun of the situation. I get help and advice from other people. I let my feelings come out freely. I get comfort and understanding from someone. I try to see it in a different light, to make it seem more



positive.		
I allow myself to express my emotions.		
I do something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.		
I realize that my feelings are valid and important.		
I make jokes about it.		
I learn to live with it.		
I concentrate my efforts on doing something about the situation I'm in.		
I say things to let my unpleasant feelings escape.		
I look for something good in what is happening.		
I say to myself "this isn't real."		
I get advice or help from other people about what to do.		
I turn to work or other activities to take my mind off things.		



Indicate for each of the statements below the degree to which this change occurred in your life as a result of a traumatic event you have experienced, using the following scale.

- 0= I did not experience this change
- 1= I experienced this change to a very small degree
- 2= I experienced this change to a small degree
- 3= I experienced this change to a moderate degree
- 4= I experienced this change to a great degree as a
- 5= I experienced this change to a very great degree
- 6= I have never experienced a traumatic event

I changed my priorities about what is important in life.  I have a greater appreciation for the value of my own life.  I developed new interests.  I developed new interests.  I have a greater feeling of self-reliance.  I have a greater feeling of self-reliance.  I have a better understanding of spiritual matters.  I have a better understanding of spiritual matters.  I more clearly see that I can count on people in times of trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater that I can handle difficulties.  I have a better that I can handle difficulties.  I have a greater sense of closeness with others  I							
I developed new interests.  I have a greater feeling of self-reliance.  I have a better understanding of spiritual matters.  I have a better understanding of spiritual matters.  I more clearly see that I can count on people in times of trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater that I can handle difficulties.  I have better that I can handle difficulties.  I have a greater sense of closeness with my life.  I have a greater sense of closeness with others  I have a greater sense of closeness with othe	I changed my priorities about what is important in life.	1	2	3	4	5	6
I have a greater feeling of self-reliance.  I have a better understanding of spiritual matters.  I have a better understanding of spiritual matters.  I more clearly see that I can count on people in times of trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have a greater sense of closeness with others  I have more compassion for others.  I have more compassion for others.  I have more compassion for others.	I have a greater appreciation for the value of my own life.	1	2	3	4	5	6
I have a better understanding of spiritual matters.  I more clearly see that I can count on people in times of trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I am more willing to express my emotions.  I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  I a can better understanding of spiritual matters.  I	I developed new interests.	1	2	3	4	5	6
I more clearly see that I can count on people in times of trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I am more willing to express my emotions.  I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  I a sale in times of the sale in tim	I have a greater feeling of self-reliance.	1	2	3	4	5	6
trouble.  I established a new path for my life.  I have a greater sense of closeness with others  I am more willing to express my emotions.  I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  I a 2 3 4 5 6   I a 3 4 5 6  I a 4 5 6  I a 5 6	I have a better understanding of spiritual matters.	1	2	3	4	5	6
I have a greater sense of closeness with others  I am more willing to express my emotions.  I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  I a a a better sense of closeness with others  I a a a better that I can handle difficulties.  I a a a better that I can handle diffi	, i	1	2	3	4	5	6
I am more willing to express my emotions.  I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.	I established a new path for my life.	1	2	3	4	5	6
I know better that I can handle difficulties.  I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  I have more compassion for others.  I have more compassion for others.  I can better that I can handle difficulties.  I can better things with my life.  I can better able to accept the way things work out.  I can better appreciate each day.	I have a greater sense of closeness with others	1	2	3	4	5	6
I am able to do better things with my life.  I am better able to accept the way things work out.  I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  1 2 3 4 5 6  2 3 4 5 6	I am more willing to express my emotions.	1	2	3	4	5	6
I am better able to accept the way things work out.  1 2 3 4 5 6  I can better appreciate each day.  1 2 3 4 5 6  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  1 2 3 4 5 6	I know better that I can handle difficulties.	1	2	3	4	5	6
I can better appreciate each day.  New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  1 2 3 4 5 6  2 5 6	I am able to do better things with my life.	1	2	3	4	5	6
New opportunities are available which wouldn't have been otherwise.  I have more compassion for others.  1 2 3 4 5 6	I am better able to accept the way things work out.	1	2	3	4	5	6
been otherwise. I have more compassion for others. I 2 3 4 5 6	I can better appreciate each day.	1	2	3	4	5	6
	been	1	2	3	4	5	6
I put more effort into my relationships. 1 2 3 4 5 6	I have more compassion for others.	1	2	3	4	5	6
	I put more effort into my relationships.	1	2	3	4	5	6



I am more likely to try to change things which need	1	2	3	4	5	6
changing.						
I have a stronger religious faith.	1	2	3	4	5	6
I discovered that I'm stronger than I thought I was.	1	2	3	4	5	6
I learned a great deal about how wonderful people are.	1	2	3	4	5	6
I better accept needing others.	1	2	3	4	5	6



## Appendix B

### **Debriefing Form**

Thank you very much for participating in our study! We hope that participating in this study was enjoyable and informative. If you have any questions, please don't hesitate to contact us, by emailing Rosa Muñoz at <a href="mailto:remunoz1@unm.edu">remunoz1@unm.edu</a>.

The purpose of this study has been to examine the factors that may protect ethnically diverse women from suffering worsened outcomes after experiencing sexual victimization. There is abundant research that illustrates the potentially negative effects that sexual victimization can have on women, but to date, almost no research has been done on the factors that may potentially protect women from experiencing these consequences. We hope that knowing more about these factors may help us, in the future, prevent adverse mental and physical health outcomes for women who have experienced sexual victimization.

If you would like to receive information regarding results of this study once it is completed, please email Rosa Muñoz at <a href="mailto:remunoz1@unm.edu">remunoz1@unm.edu</a>.

If you or someone you know has experienced sexual victimization, one resource that may be of interest to you is <a href="http://rapecrisiscnm.org/">http://rapecrisiscnm.org/</a>. The <a href="Rape Crisis Center of Central New Mexico">Rape Crisis Center of Central New Mexico</a> (RCCCNM) provides <a href="emotional support">emotional support</a> and <a href="mailto:advocacy">advocacy</a> to survivors of sexual assault and abuse throughout Central New Mexico, and serves as a <a href="mailto:community resource">community resource</a> on issues regarding prevention and awareness of sexual assault and abuse. They are reachable 24/7 505-266-7711.

If you are outside of Central New Mexico and are interested in resources for yourself or a friend, <a href="http://www.lapinon.org/resources2.htm">http://www.lapinon.org/resources2.htm</a> is an exhaustive list of agencies in New Mexico that serve the communities.

RAINN (Rape, Abuse and Incest National Network) is the largest anti-sexual violence organization in the United States. They are located at <a href="http://www.rainn.org/">http://www.rainn.org/</a>. There is also a 24 hour confidential helpline, reachable at 1-800-656-HOPE.

If you are in Albuquerque, the UNM Psychology Clinic is a resource that is available to you. They are located at 1820 Sigma Chi Road, just south of Lomas, in Albuquerque, NM. They can be reached at 505-277-5164

If you or anyone you know is experiencing suicidal thoughts, AGORA Crisis Center is also a resource available to you. Within Albuquerque, they can be reached at 505-277-3013, and are located next to the UNM Psychology Clinic on the UNM campus.



AGORA's web address is <a href="www.AgoraCares.org">www.AgoraCares.org</a>. If you are calling from outside of Albuquerque, please call 1-866-HELP-1-NM.



Appendix C

Tables



Table 1
Demographic Information

Category		Hispa (n=15				NHW (n=19		
	Min	Max	<i>M</i>	SD	Min	Max	<i>M</i>	SD
Age	18	24	20.11	1.62	18	24	20.33	1.73
Alcohol Use	0	7	2.29	1.85	0	8	2.62	1.80
Physical Health	15	41	22.84	5.65	15	36	21.97	4.55
Trauma Symptoms	40	118	61.86	18.35	40	130	63.92	19.14
Religiosity	6	51	24.39	10.41	6	52	19.76	10.76
Active Cope	2	7	3.25	1.27	2	8	3.16	1.29
Positive Reframe	2	8	4.73	1.41	2	8	4.67	1.45
Coping through Humor	2	8	5.06	1.63	2	8	5.01	1.42
Acceptance Coping	2	8	5.79	1.69	2	8	5.72	1.63
Planning Coping	2	8	5.15	1.46	2	8	5.16	1.60
Posttraumatic Growth	21	147	98.11	32.05	21	147	90.30	34.31
Ethnic Identity	23	60	42.41	8.27	12	59	35.12	7.51
Mainstream Comfort	9	30	22.16	4.61	6	30	23.29	4.95
Perceived Discrimination	9	45	29.24	6.71	9	41	19.90	6.73
Social Affiliation	5	25	13.61	4.35	5	25	12.28	4.42
General Distress	0	4	1.63	.628	0	4	1.65	.607
Sexual Abuse	5	30	7.98	6.55	5	30	12.28	4.42
Physical Abuse	5	30	7.21	3.49	5	30	6.78	3.85
Emotional Abuse	5	30	7.22	3.50	5	30	9.27	5.75

*Note:* All scale minimum/maximum values are given. *M*=mean score on scale indicated *SD*=standard deviation of scale indicated. All values are continuous, with higher numbers indicating higher scores on those measures.



Table 2
Severity of Adult/Adolescent Sexual Victimization among Hispanic and Non-Hispanic White Women

Level of victimization	Hispanic (n=156)	NHW ( <i>n</i> =198)	$\chi^2$	p
None	62.2%	57.6%	2.73	.603
Unwanted sexual contact	9.0%	8.1%	4.74	.090
Sexual coercion	11.5%	10.6%	3.04	.219
Attempted rape	7.1%	7.6%	3.33	.189
Completed rape	10.3%	16.2%	3.05	.218

*Note:* SES coded as a continuous variable, with 0=none, 1=unwanted sexual contact, 2=sexual coercion, 3=attempted rape, 4=completed rape.



Table 3

Intercorrelations Between Measures

	1	2	3	4
1 Race	1			
2 Alcohol Use	0.091	1		
3 Physical Health	-0.085	-0.045	1	
4 Trauma Symptoms	0.055	.120*	.732**	1
5 Religiosity	212**	248**	0.013	146**
6 Cope (Active)	-0.033	0.032	.320**	.438**
7 Cope (Positive)	-0.022	.147*	0.034	0.089
8 Cope (Plan)	0.004	.128*	144**	164**
9 Cope (Humor)	-0.014	.138*	0.022	-0.047
10 Cope (Accept)	-0.021	-0.048	132*	278**
11 Posttraumatic Growth	116*	146*	-0.097	206**
12 General Distress	0.015	.127*	.720**	.874**
13 Ethnic Identity	419**	-0.109	0.049	-0.084
14 Perceived Discrimination	569**	-0.045	.193**	.115*
15 Mainstream Comfort	.117*	0.034	195**	213**
16 Social Affiliation	149**	0.066	0.028	0.048
17 Childhood Emotional				
Abuse	0.001	-0.046	.484**	.521**
18 Childhood Sexual Abuse	-0.053	-0.039	.282**	.339**
19 Childhood Physical Abuse	-0.059	-0.035	.263**	.231**
20 Sexual Victimization	0.075	.252**	.210**	.326**

Note: Race=the participant's race. Alcohol Use=frequency of alcohol use. Physical Health=somatic symptoms. Trauma Symptoms=trauma symptomatology. Religiosity=religious endorsement. Cope (Active, Positive, Planning, Humor & Acceptance)=coping style. Posttraumatic growth=degree of growth experienced after trauma. General Distress=general psychological distress. Ethnic Identity=identification with one's own ethnic group. Perceived Discrimination=degree to which participants perceive discrimination. Mainstream Comfort=degree of comfort within mainstream society. Social Affiliation=comfort and preference for one's own social groups. Childhood Sexual Abuse=sexual abuse before the age of 14 (coded as a continuous variable). Sexual Victimization=adolescent/adult victimization severity, coded as (0) none, (1) unwanted contact, (2) sexual coercion, (3) attempted rape, and (4) completed rape.

\* p < .05. \*\* p < .01.



Table 3, continued

Intercorrelations Between Measures

	5	6	7	8	9
5 Religiosity	1				
6 Cope (Active)	-0.036	1			
7 Cope (Positive)	-0.052	0.092	1		
8 Cope (Plan)	.116*	124*	.603**	1	
9 Cope (Humor)	0.089	-0.015	.510**	.609**	1
10 Cope (Accept)	.175**	222**	.337**	.594**	.553**
11 Posttraumatic Growth	.198**	121*	0.085	.249**	.241**
12 General Distress	-0.102	.481**	0.077	179**	-0.009
13 Ethnic Identity	.309**	-0.031	0.061	.148**	.126*
14 Perceived Discrimination	.113*	.114*	0.097	0.037	.116*
15 Mainstream Comfort	0.029	143**	-0.058	0.061	-0.038
16 Social Affiliation	.134*	0.062	109*	-0.077	-0.017
17 Childhood Emotional					
Abuse	-0.101	.242**	.134*	122*	-0.007
18 Childhood Sexual Abuse	-0.052	.115*	-0.005	-0.099	-0.068
19 Childhood Physical Abuse	-0.027	0.032	0.074	120*	-0.085
20 Sexual Victimization	150**	.124*	.194**	0.051	0.049

Note: Race=the participant's race. Alcohol Use=frequency of alcohol use. Physical Health=somatic symptoms. Trauma Symptoms=trauma symptomatology. Religiosity=religious endorsement. Cope (Active, Positive, Planning, Humor & Acceptance)=coping style. Posttraumatic growth=degree of growth experienced after trauma. General Distress=general psychological distress. Ethnic Identity=identification with one's own ethnic group. Perceived Discrimination=degree to which participants perceive discrimination. Mainstream Comfort=degree of comfort within mainstream society. Social Affiliation=comfort and preference for one's own social groups. Childhood Sexual Abuse=sexual abuse before the age of 14 (coded as a continuous variable). Sexual Victimization=adolescent/adult victimization severity, coded as (0) none, (1) unwanted contact, (2) sexual coercion, (3) attempted rape, and (4) completed rape.

\* p < .05. \*\* p < .01.



Table 3, continued

#### Intercorrelations Between Measures

	10	11	12	13	14
10 Cope (Accept)	1				
11 Posttraumatic Growth	.250**	1			
12 General Distress	284**	195**	1		
13 Ethnic Identity	.154**	.183**	-0.065	1	
14 Perceived Discrimination	0.035	.112*	.179**	.391**	1
15 Mainstream Comfort	0.05	0.01	221**	206**	342**
16 Social Affiliation	-0.079	0.045	0.063	.263**	.214**
17 Childhood Emotional					
Abuse	156**	184**	.472**	118*	-0.002
18 Childhood Sexual Abuse	108*	177**	.298**	-0.034	0.099
19 Childhood Physical Abuse	122*	-0.087	.205**	-0.005	0.059
20 Sexual Victimization	-0.074	184**	.237**	-0.103	-0.04

Note: Race=the participant's race. Alcohol Use=frequency of alcohol use. Physical Health=somatic symptoms. Trauma Symptoms=trauma symptomatology. Religiosity=religious endorsement. Cope (Active, Positive, Planning, Humor & Acceptance)=coping style. Posttraumatic growth=degree of growth experienced after trauma. General Distress=general psychological distress. Ethnic Identity=identification with one's own ethnic group. Perceived Discrimination=degree to which participants perceive discrimination. Mainstream Comfort=degree of comfort within mainstream society. Social Affiliation=comfort and preference for one's own social groups. Childhood Sexual Abuse=sexual abuse before the age of 14 (coded as a continuous variable). Sexual Victimization=adolescent/adult victimization severity, coded as (0) none, (1) unwanted contact, (2) sexual coercion, (3) attempted rape, and (4) completed rape.



<sup>\*</sup> p < .05. \*\* p < .01.

Table 3, continued

#### Intercorrelations Between Measures

	15	16	17	18	19
15 Mainstream Comfort	1				
16 Social Affiliation	-0.078	1			
17 Childhood Emotional					
Abuse	224**	-0.054	1		
18 Childhood Sexual Abuse	-0.083	-0.008	.406**	1	
19 Childhood Physical Abuse	156**	-0.047	.599**	.346**	1
20 Sexual Victimization	-0.026	0.026	.281**	.278**	.225**

Note: Race=the participant's race. Alcohol Use=frequency of alcohol use. Physical Health=somatic symptoms. Trauma Symptoms=trauma symptomatology. Religiosity=religious endorsement. Cope (Active, Positive, Planning, Humor & Acceptance)=coping style. Posttraumatic growth=degree of growth experienced after trauma. General Distress=general psychological distress. Ethnic Identity=identification with one's own ethnic group. Perceived Discrimination=degree to which participants perceive discrimination. Mainstream Comfort=degree of comfort within mainstream society. Social Affiliation=comfort and preference for one's own social groups. Childhood Sexual Abuse=sexual abuse before the age of 14 (coded as a continuous variable). Sexual Victimization=adolescent/adult victimization severity, coded as (0) none, (1) unwanted contact, (2) sexual coercion, (3) attempted rape, and (4) completed rape.



<sup>\*</sup> *p* < .05. \*\* *p* < .0

Table 4

Trauma Symptoms in Hispanic and Non-Hispanic White Women as a Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization

			2		
Hispanic	β	t	$R^2$	p	
SES	.185	2.59	.365	.01	
CTQ-EA	.512	5.90	.365	<.001	
CTQ-SA	.103	1.38	.365	.169	
CTQ-PA	059	.677	.365	.499	
Non-Hispanic					
White					
SES	.142	2.18	.328	.03	
CTQ-EA	.508	6.37	.328	<.001	
CTQ-SA	.178	2.55	.328	.01	
CTQ-PA	225	-3.00	.328	.003	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse; NHW=Non-Hispanic White



Table 5

Physical Health Symptoms in Hispanic and Non-Hispanic White Women as a Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization

Hispanic	β	t	$R^2$	p	
SES	.126	1.64	.314	.102	
CTQ-EA	.458	4.86	.314	<.001	
CTQ-SA	.079	.978	.314	.330	
CTQ-PA	.025	.257	.314	.797	
Non-Hispanic White					
SES	.026	.364	.228	.716	
CTQ-EA	.464	5.39	.228	<.001	
CTQ-SA	.119	1.57	.228	.118	
CTQ-PA	119	-1.47	.228	.144	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse



Table 6

General Psychological Distress in Hispanic and Non-Hispanic White Women as a Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization

Hispanic	β	t	$R^2$	p	
SES CTQ-EA CTQ-SA	.108 .523 .032	1.44 5.78 .408	.313 .313 .313	.150 <.001 .684	
CTQ-PA	029	313	.313	.750	
Non-Hispanic White					
SES	.064	.936	.259	.350	
CTQ-EA	.440	5.19	.259	<.001	
CTQ-SA	.228	3.07	.259	.002	
CTQ-PA	236	-2.98	.259	.003	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse



Table 7

Alcohol Use in Hispanic and Non-Hispanic White Women as a Function of Childhood Emotional and Sexual Abuse and Adolescent/Adult Sexual Victimization

Hispanic	β	t	$R^2$	p	
SES	.245	2.57	.078	.01	
CTQ-EA	090	777	.078	.439	
CTQ-SA	171	1.69	.078	.09	
CTQ-PA	.139	1.17	.078	.244	
Non-Hispanic White	200		20.7		
SES	.300	3.62	.095	<.001	
CTQ-EA	071	707	.095	.481	
CTQ-SA	023	264	.095	.792	
CTQ-PA	130	-1.41	.095	.16	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse



Table 8

The Influence of Acculturation on the Relationship Between Trauma Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.154	2.41	.474	.018	
CTQ-EA	.498	5.79	.474	<.001	
CTQ-SA	.084	1.10	.474	.274	
CTQ-PA	055	581	.474	.562	
SEE_PD	.270	3.39	.474	<.001	
SEE_MC	054	702	.474	.484	
PDx Vic	075	931	.474	.354	
PDxCTQ-EA	.115	1.24	.474	.216	
PDxCTQ-SA	104	-1.17	.474	.244	
PDxCTQ-PA	.215	2.20	.474	.030	
MCxVic	058	706	.474	.482	
MCxCTQ-EA	065	576	.474	.565	
MCxCTQ-SA	006	070	.474	.944	
MCxCTQ-PA	.254	2.26	.474	.026	
Non-Hispanic					
White					
SES	.124	1.89	.401	<.001	
CTQ-EA	.560	6.14	.401	<.001	
CTQ-SA	.159	2.11	.401	.036	
CTQ-PA	220	-2.80	.401	.006	
SEE_PD	.123	1.87	.401	.06	
SEE_MC	088	-1.27	.401	.206	
PDxVic	027	435	.401	.664	
PDxCTQ-EA	017	210	.401	.834	
PDxCTQ-SA	117	-1.47	.401	.144	
PDxCTQ-PA	.071	.842	.401	.401	
MCxVic	.044	.643	.401	.521	
MCxCTQ-EA	.167	1.72	.401	.087	
MCxCTQ-SA	118	-1.26	.401	.210	
MCxCTQ-PA	063	671	.401	.409	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse; SEE\_PD=Perceived Discrimination; SEE\_MC=Mainstream Comfort.



Table 9

The Influence of Acculturation on the Relationship between Physical Health and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$		
	<i>-</i>			<u>r</u>	
SES	.090	1.15	.463	.253	
CTQ-EA	.470	5.19	.463	<.001	
CTQ-PA	.003	.033	.463	.974	
CTQ-SA	.060	.744	.463	.458	
SEE_PD	.315	3.65	.463	<.001	
SEE_MC	022	278	.463	.781	
PDxVic	.026	.352	.463	.725	
PDxCTQ-EA	073	725	.463	.470	
PDxCTQ-SA	025	260	.463	.795	
PDxCTQ-PA	.410	3.80	.463	<.001	
MCxVic	.175	2.05	.463	.043	
MCxCTQ-EA	254	-2.10	.463	.038	
MCxCTQ-SA	.013	.157	.463	.876	
MCxCTQ-PA	.033	2.76	.463	.007	
Non-Hispanic					
White	0.62	054	270	20.4	
SES	.063	.854	.279	.394	
CTQ-EA	.468	4.64	.279	<.001	
CTQ-PA	169	-1.94	.279	.054	
CTQ-SA	.115	1.37	.279	.174	
SEE_PD	.115	1.60	.279	.111	
SEE_MC	022	292	.279	.770	
PDxVic	.007	.106	.279	.916	
PDxCTQ-EA	128	-1.40	.279	.164	
PDxCTQ-SA	024	272	.279	.786	
PDxCTQ-PA	.001	.011	.279	.991	
MCxVic	001	018	.279	.985	
MCxCTQ-EA	027	248	.279	.805	
MCxCTQ-SA	.097	.935	.279	.351	
MCxCTQ-PA	.025	.244	.279	.808	

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse; SEE\_PD=Perceived Discrimination; SEE\_MC=Mainstream Comfort



Table 10

The Influence of Acculturation on the Relationship between General Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p
SES	.095	1.25	.456	.213
CTQ-EA	.514	5.87	.456	<.001
CTQ-SA	.007	.088	.456	.930
CTQ-PA	016	164	.456	.870
SEE_PD	.256	3.16	.456	.002
SEE_MC	046	587	.456	.558
PDxVic	009	112	.456	.911
PDxCTQ-EA	.160	1.70	.456	.091
PDxCTQ-SA	097	-1.06	.456	.289
PDxCTQ-PA	.312	3.14	.456	.002
MCxVic	.011	.135	.456	.893
MCxCTQ-EA	022	190	.456	.850
MC-CTO CA	.023	.275	.456	.784
MCxCTQ-SA	.023	.213	. 730	. / О 1
MCxCTQ-PA	.249	2.18	.456	.032
MCxCTQ-PA Non-Hispanic White	.249	2.18	.456	.032
MCxCTQ-PA  Non-Hispanic White SES	.087	1.25	.456	.032
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA	.087	2.18 1.25 4.69	.456 .349 .349	.032 .212 <.001
MCxCTQ-PA  Non-Hispanic  White SES CTQ-EA CTQ-SA	.087 .450 .197	1.25 4.69 2.49	.456 .349 .349 .349	.032 .212 <.001 .014
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA	.087 .450 .197 217	1.25 4.69 2.49 -2.63	.456 .349 .349 .349 .349	.032 .212 <.001 .014 .009
MCxCTQ-PA  Non-Hispanic  White  SES  CTQ-EA  CTQ-SA  CTQ-PA  SEE_PD	.249 .087 .450 .197 217 .189	1.25 4.69 2.49 -2.63 2.74	.456 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007
MCxCTQ-PA  Non-Hispanic  White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC	.087 .450 .197 217 .189 077	2.18 1.25 4.69 2.49 -2.63 2.74 -1.04	.456 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC PDxVic	.249 .087 .450 .197 217 .189 077 010	1.25 4.69 2.49 -2.63 2.74 -1.04 159	.456 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC PDxVic PDxCTQ-EA	.249 .087 .450 .197 217 .189 077 010 087	1.25 4.69 2.49 -2.63 2.74 -1.04 159 952	.456 .349 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874 .342
MCxCTQ-PA  Non-Hispanic  White  SES  CTQ-EA  CTQ-SA  CTQ-PA  SEE_PD  SEE_MC  PDxVic  PDxCTQ-EA  PDxCTQ-SA	.249 .087 .450 .197 217 .189 077 010 087 104	2.18  1.25 4.69 2.49 -2.63 2.74 -1.04159952 -1.18	.456 .349 .349 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874 .342 .239
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA	.249 .087 .450 .197217 .189077010087104 .114	2.18  1.25 4.69 2.49 -2.63 2.74 -1.04159952 -1.18 1.24	.456 .349 .349 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874 .342 .239 .218
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA MCxVic	.249 .087 .450 .197217 .189077010087104 .114 .073	1.25 4.69 2.49 -2.63 2.74 -1.04 159 952 -1.18 1.24	.456 .349 .349 .349 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874 .342 .239 .218 .322
MCxCTQ-PA  Non-Hispanic White SES CTQ-EA CTQ-SA CTQ-PA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA	.249 .087 .450 .197217 .189077010087104 .114	2.18  1.25 4.69 2.49 -2.63 2.74 -1.04159952 -1.18 1.24	.456 .349 .349 .349 .349 .349 .349 .349 .349	.032 .212 <.001 .014 .009 .007 .301 .874 .342 .239 .218

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse; SEE\_PD=Perceived Discrimination; SEE\_MC=Mainstream Comfort



Table 11

The Influence of Acculturation on the Relationship between Alcohol Use and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p
SES	.238	2.08	.090	.04
CTQ-EA	087	664	.090	.508
CTQ-PA	.060	.357	.090	.722
CTQ-SA	127	982	.090	.329
SEE_PD	049	375	.090	.709
SEE_MC	.039	.324	.090	.746
PDxVic	015	114	.090	.910
PDxCTQ-EA	.043	.289	.090	.773
PDxCTQ-SA	112	667	.090	.506
PDxCTQ-PA	008	053	.090	.958
MCxVic	.098	.768	.090	.445
MCxCTQ-EA	051	297	.090	.767
MCxCTQ-SA	077	537	.090	.593
MCxCTQ-PA	061	332	.090	.740
Non-Hispanic White		2.02		004
White SES	.335	3.93	.223	<.001
White SES CTQ-EA	.010	.083	.223	.934
White SES CTQ-EA CTQ-PA	.010 039	.083 408	.223 .223	.934 .684
White SES CTQ-EA CTQ-PA CTQ-SA	.010 039 144	.083 408 -1.39	.223 .223 .223	.934 .684 .168
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD	.010 039 144 .035	.083 408 -1.39 .415	.223 .223 .223 .223	.934 .684 .168 .679
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC	.010 039 144 .035 .040	.083 408 -1.39 .415 .438	.223 .223 .223 .223 .223	.934 .684 .168 .679 .662
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic	.010 039 144 .035 .040 113	.083 408 -1.39 .415 .438 -1.30	.223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic PDxCTQ-EA	.010 039 144 .035 .040 113 086	.083 408 -1.39 .415 .438 -1.30 792	.223 .223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662 .195
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA	.010 039 144 .035 .040 113 086	.083 408 -1.39 .415 .438 -1.30 792 1.52	.223 .223 .223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662 .195 .430
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA	.010 039 144 .035 .040 113 086 .172	.083 408 -1.39 .415 .438 -1.30 792 1.52 1.90	.223 .223 .223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662 .195 .430 .130
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA MCxVic	.010 039 144 .035 .040 113 086 .172 .214	.083 408 -1.39 .415 .438 -1.30 792 1.52 1.90 1.36	.223 .223 .223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662 .195 .430 .130 .059
White SES CTQ-EA CTQ-PA CTQ-SA SEE_PD SEE_MC PDxVic PDxCTQ-EA PDxCTQ-SA PDxCTQ-PA	.010 039 144 .035 .040 113 086 .172	.083 408 -1.39 .415 .438 -1.30 792 1.52 1.90	.223 .223 .223 .223 .223 .223 .223 .223	.934 .684 .168 .679 .662 .195 .430 .130

*Note:* SES=Sexual Experiences Survey; CTQ-EA=Childhood Emotional Abuse; CTQ-SA=Childhood Sexual Abuse; CTQ-PA=Childhood Physical Abuse; SEE\_PD=Perceived Discrimination; SEE\_MC=Mainstream Comfort



Table 12

The Influence of Religiosity on the Relationship Between Trauma Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.151	2.07	.409	.04	
CTQ-EA	.497	5.70	.409	<.001	
CTQ-PA	.049	.473	.409	.637	
CTQ-SA	.108	1.45	.409	.150	
RPB	105	-1.52	.409	.131	
RPBxVic	036	521	.409	.603	
RPBxCTQ-EA	024	252	.409	.801	
RPBxCTQ-PA	.166	1.57	.409	.120	
RPBxCTQ-SA	.131	1.74	.409	.085	
Non-Hispanic Whi	ite				
White					
SES	.148	2.15	.354	.033	
CTQ-EA	.486	5.61	.354	<.001	
CTQ-PA	210	-2.51	.354	.013	
CTQ-SA	.232	2.90	.354	.004	
RPB	020	283	.354	.777	
RPBxVic	049	712	.354	.477	
RPBxCTQ-EA	.049	.592	.354	.555	
RPBxCTQ-PA	141	-1.59	.354	.113	
RPBxCTQ-SA	.096	1.14	.354	.257	
•					



Table 13

The Influence of Religiosity on the Relationship Between Somatic Complaints and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.094	1.21	.375	.230	
CTQ-EA	.479	5.07	.375	<.001	
CTQ-PA	.119	1.06	.375	.293	
CTQ-SA	.055	.696	.375	.487	
RPB	.125	1.67	.375	.097	
RPBxVic	.041	.554	.375	.580	
RPBxCTQ-EA	088	843	.375	.401	
RPBxCTQ-PA	.089	.762	.375	.447	
RPBxCTQ-SA	.181	2.22	.375	.029	
Non-Hispanic					
White					
SES	.032	.441	.284	.660	
CTQ-EA	.489	5.32	.284	<.001	
CTQ-PA	128	-1.42	.284	.156	
CTQ-SA	.229	2.46	.284	.015	
RPB	.067	.891	.284	.374	
RPBxVic	034	463	.284	.644	
RPBxCTQ-EA	.215	2.43	.284	.016	
RPBxCTQ-PA	305	-3.10	.284	.002	



Table 14

The Influence of Religiosity on the Relationship Between General Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.067	.876	.361	.382	
CTQ-EA	.516	5.68	.361	<.001	
CTQ-PA	.118	1.10	.361	.274	
CTQ-SA	.043	.554	.361	.581	
RPB	008	111	.361	.911	
RPBxVic	040	551	.361	.583	
RPBxCTQ-EA	.033	.326	.361	.745	
RPBxCTQ-PA	.197	1.78	.361	.078	
RPBxCTQ-SA	.058	.730	.361	.467	
Non-Hispanic					
White					
SES	.058	.793	.284	.429	
CTQ-EA	.442	4.79	.284	<.001	
CTQ-PA	207	-2.30	.284	.023	
CTQ-SA	.251	2.95	.284	.004	
RPB	045	605	.284	.546	
RPBxVic	067	922	.284	.358	
RPBxCTQ-EA	.130	1.46	.284	.146	
RPBxCTQ-PA	169	-1.78	.284	.077	
RPBxCTQ-SA	.051	.565	.284	.573	



Table 15

The Influence of Religiosity on the Relationship Between Alcohol Use and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.274	2.65	.118	.009	
CTQ-EA	067	555	.118	.580	
CTQ-PA	.018	.118	.118	.906	
CTQ-SA	174	-1.67	.118	.098	
RPB	173	-1.85	.118	.067	
RPBxVic	047	470	.118	.639	
RPBxCTQ-EA	069	515	.118	.608	
RPBxCTQ-PA	105	674	.118	.502	
RPBxCTQ-SA	.100	.913	.118	.363	
Non-Hispanic					
White_					
SES	.261	3.01	.155	.003	
CTQ-EA	055	522	.155	.602	
CTQ-PA	074	721	.155	.472	
CTQ-SA	069	627	.155	.532	
RPB	226	-2.60	.155	.010	
RPBxVic	.006	.065	.155	.948	
RPBxCTQ-EA	.166	1.58	.155	.117	
RPBxCTQ-PA	032	268	.155	.789	
RPBxCTQ-SA	109	925	.155	.256	



Table 16

The Influence of Posttraumatic Growth on the Relationship Between Trauma
Symptomatology and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.069	.625	.498	.535	
CTQ-EA	.728	5.12	.498	<.001	
CTQ-PA	218	-1.49	.498	.143	
CTQ-SA	.065	.564	.498	.576	
PTGI	.033	.288	.498	.774	
PTGIxSES	263	-2.48	.498	.017	
Non-Hispanic White					
SES	129	-1.32	.376	.191	
CTQ-EA	.521	4.14	.376	<.001	
CTQ-PA	235	-2.07	.376	.042	
CTQ-SA	.039	.327	.376	.745	
PTGI	.228	1.64	.376	.105	
		-2.95	.376	.004	



Table 17

The Influence of Posttraumatic Growth on the Relationship Between Physical Health and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.136	1.04	.315	.303	
CTQ-EA	.502	2.98	.315	.005	
CTQ-PA	074	427	.315	.671	
CTQ-SA	.039	.287	.315	.775	
PTGI	053	395	.315	.695	
PTGIxSES	123	971	.315	.337	
Non-Hispanic White					
SES	152	-1.38	.248	.172	
CTQ-EA	.409	2.93	.248	.005	
CTQ-PA	140	-1.10	.248	.271	
CTQ-SA	.066	.487	.248	.628	
PTGI	.204	1.32	.248	.190	
PTGIxSES	358	-2.08	.248	.041	



Table 18

The Influence of Posttraumatic Growth on the Relationship Between General Psychological Distress and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	042	395	.522	.694	
CTQ-EA	.714	5.14	.522	<.001	
CTQ-PA	102	718	.522	.476	
CTQ-SA	.010	.087	.522	.931	
PTGI	040	360	.522	.721	
PTGIxSES	213	-2.06	.522	.045	
Non-Hispanic White					
SES	185	-1.81	.313	.075	
CTQ-EA	.396	3.00	.313	.004	
CTQ-PA	231	-1.94	.313	.056	
CTQ-SA	.184	1.48	.313	.143	
PTGI	.087	.596	.313	.553	
PTGIxSES	289	-1.79	.313	.078	



Table 19

The Influence of Posttraumatic Growth on the Relationship Between Alcohol Use and Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p
SES	062	380	.073	.706
CTQ-EA	067	318	.073	.752
CTQ-PA	.245	1.12	.073	.269
CTQ-SA	232	-1.42	.073	.163
PTGI	106	655	.073	.516
PTGIxSES	041	265	.073	.792
Non-Hispanic White	222	2.05	227	006
SES	.323	2.85	.237	.006
CTQ-EA	190	-1.25	.237	.216
CTQ-PA	100	755	.237	.453
CTQ-SA	212	-1.54	.237	.130
PTGI	227	-1.24	.237	.220
PTGIxSES	.046	.239	.237	.812



Table 20

Active Coping as a Function of Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.102	1.21	.112	.230	
CTQ-EA	.388	3.78	.112	<.001	
CTQ-PA	237	-2.29	.112	.023	
CTQ-SA	005	060	.112	.952	
Non-Hispanic White					
SES	.046	.605	.070	.546	
CTQ-EA	.270	2.88	.070	.004	
CTQ-PA	170	-1.93	.070	.055	
CTQ-SA	.068	.834	.070	.406	



Table 21

Coping Through Planning as a Function of Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.216	2.49	.077	.014	
CTQ-EA	144	-1.38	.077	.171	
CTQ-PA	107	-1.01	.077	.313	
CTQ-SA	068	748	.077	.456	
Non-Hispanic White					
SES	.058	.742	.022	.459	
CTQ-EA	017	178	.022	.859	
CTQ-PA	072	802	.022	.424	
CTQ-SA	104	-1.24	.022	.218	



Table 22

Coping with Humor as a Function of Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.214	2.47	.074	.015	
CTQ-EA	097	929	.074	.354	
CTQ-PA	164	-1.55	.074	.123	
CTQ-SA	038	.418	.074	.677	
Non-Hispanic White					
SES	013	168	.034	.867	
CTQ-EA	.229	2.40	.034	.017	
CTQ-PA	102	-1.14	.034	.256	
CTQ-SA	125	-1.50	.034	.136	



Table 23

Coping Through Acceptance as a Function of Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.143	1.66	.086	.098	
CTQ-EA	280	-2.68	.086	.008	
CTQ-PA	054	513	.086	.609	
CTQ-SA	.041	.453	.086	.651	
Non-Hispanic White					
SES	116	-1.49	.037	.137	
CTQ-EA	.023	.245	.037	.807	
CTQ-PA	046	511	.037	.610	
CTQ-SA	111	-1.33	.037	.184	



Table 24

Coping Through Positive Reframing as a Function of Childhood Abuse and Adolescent/Adult Victimization in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
SES	.273	3.16	.077	.002	
CTQ-EA	.084	.806	.077	.422	
CTQ-PA	086	813	.077	.417	
CTQ-SA	023	257	.077	.797	
Non-Hispanic White					
SES	.138	1.79	.058	.075	
CTQ-EA	.192	2.03	.058	.044	
CTQ-PA	.011	.118	.058	.906	
CTQ-SA	180	-2.17	.058	.032	



Table 25

The Influence of Active Coping on the Relationship Between Trauma Symptomatology and Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
COPE (ACTIVE) CTQ-EA COPExCTQ-EA	.352 .442 .080	5.40 6.61 1.22	.442 .442 .442	<.001 <.001 .226	
Non-Hispanic White COPE (ACTIVE) CTQ-EA	.296 .414	4.73 6.73	.340 .340	<.001 <.001	
COPExCTQ-EA	.057	.905	.340	.367	

*Note:* COPE (ACTIVE)=Active Coping; CTQ-EA=Childhood Emotional Abuse; x=interaction term



Table 26

The Influence of Active Coping on the Relationship Between Physical Health and Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
COPE (ACTIVE)	.315	4.42	.379	<.001	
CTQ-EA	.427	5.86	.379	<.001	
COPExCTQ-EA	.060	.835	.379	.405	
Non-Hispanic White					
COPE (ACTIVE)	.181	2.66	.231	.009	
CTQ-EA	.422	6.29	.231	<.001	
COPExCTQ-EA	050	722	.231	.471	

Note: COPE (ACTIVE)=Active Coping; CTQ-EA=Childhood Emotional Abuse



Table 27

The Influence of Active Coping on the Relationship Between General Psychological Distress and Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p
COPE (ACTIVE)	.385	6.05	.469	<.001
CTQ-EA	.397	6.09	.469	<.001
COPExCTQ-EA	.149	2.33	.469	.021
Non-Hispanic White				
COPE (ACTIVE)	.369	5.78	.320	<.001
CTQ-EA	.323	5.14	.320	<.001
COPExCTQ-EA	.059	.915	.320	.361

Note: COPE (ACTIVE)=Active Coping; CTQ-EA=Childhood Emotional Abuse

Table 28

The Influence of Active Coping on the Relationship Between Alcohol Use and Adolescent/Adult Victimization and Childhood Emotional Abuse in Hispanic and Non-Hispanic White Women

Hispanic	β	t	$R^2$	p	
COPE (ACTIVE)	005	047	.002	.962	
CTQ-EA	031	318	.002	.751	
COPExCTQ-EA	.044	.444	.002	.658	
Non-Hispanic White					
COPE (ACTIVE)	.080	1.00	.030	.318	
CTQ-EA	069	862	.030	.390	
COPExCTQ-EA	148	-1.86	.030	.064	

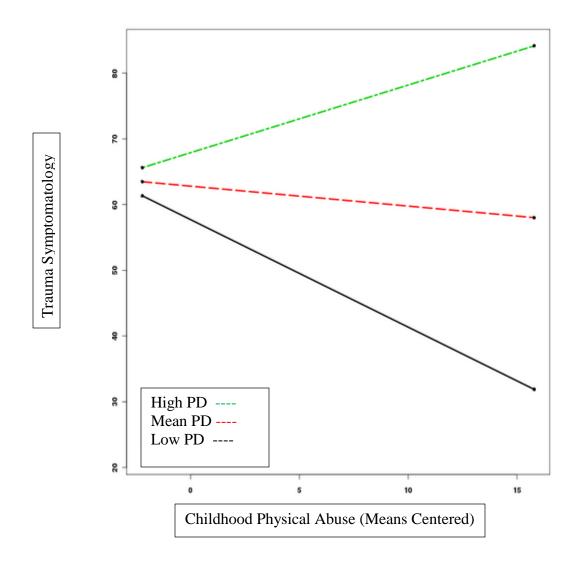
Note: COPE (ACTIVE)=Active Coping; CTQ-EA=Childhood Emotional Abuse



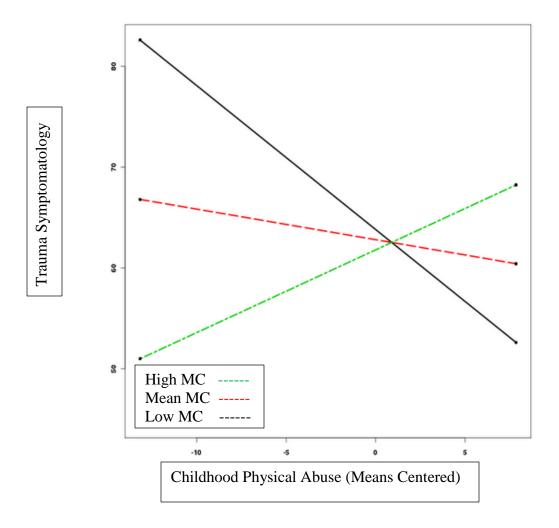
Appendix D

Figures





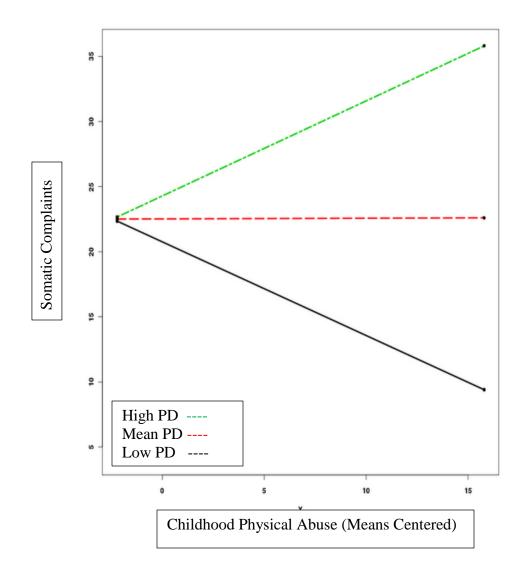
*Note:* PD=Perceived Discrimination *Figure 1.* The relationship between trauma symptomatology and physical abuse in Hispanic women, moderated by perceived discrimination.



Note: MC=Mainstream Comfort

Figure 2. The relationship between trauma symptoms and childhood physical abuse in Hispanic women, moderated by mainstream comfort

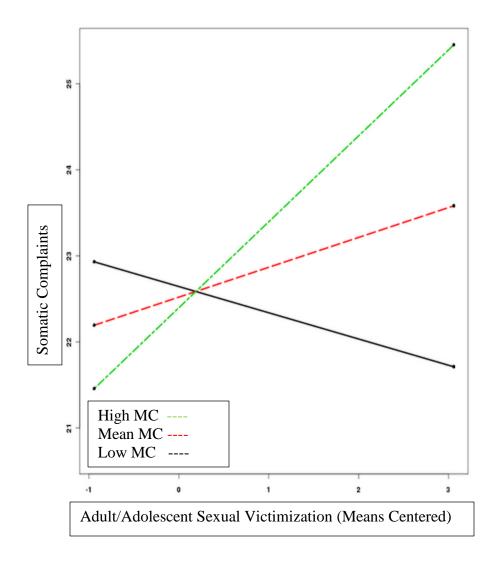




Note: PD=Perceived Discrimination

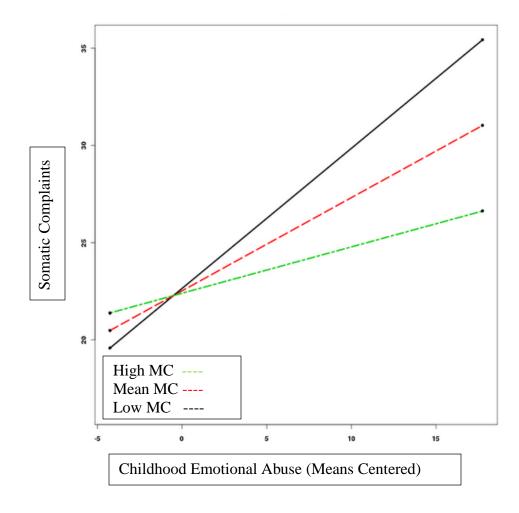
*Figure 3.* The relationship between somatic complaints and childhood physical abuse in Hispanic women, moderated by perceived discrimination.



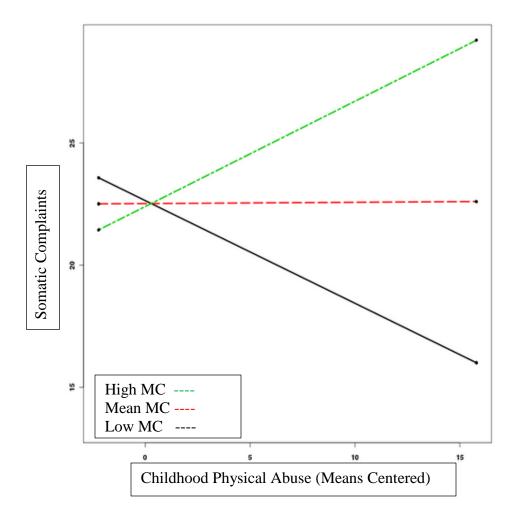


Note: MC=Mainstream Comfort

Figure 4. The relationship between somatic complaints and adult/adolescent sexual victimization in Hispanic women, moderated by mainstream comfort



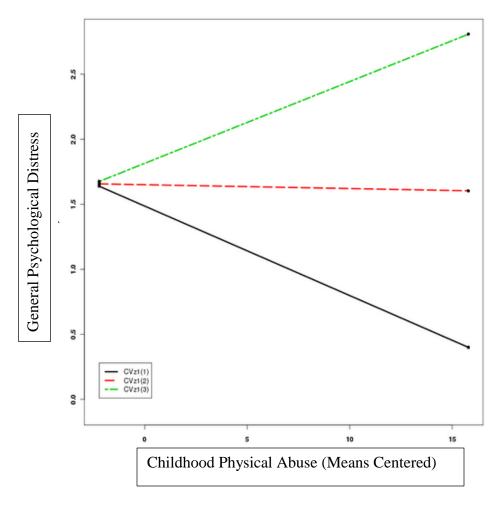
*Note: MC*=Mainstream Comfort *Figure 5.* The relationship between somatic complaints and childhood emotional abuse in Hispanic women, moderated by mainstream comfort



*Note:* MC=Mainstream Comfort

Figure 6. The relationship between somatic complaints and childhood physical abuse in Hispanic women, moderated by mainstream comfort

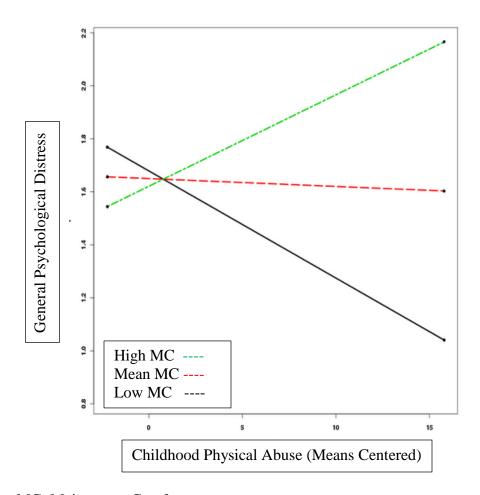




Note: PD=Perceived Discrimination

Figure 7. The relationship between general psychological distress and childhood physical abuse in Hispanic women, moderated by perceived discrimination.

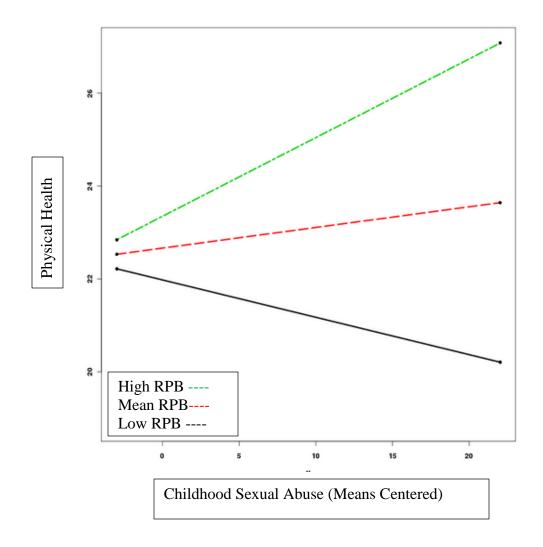




Note: MC=Mainstream Comfort

Figure 8. The relationship between general psychological distress and childhood physical abuse in Hispanic women, moderated by mainstream comfort

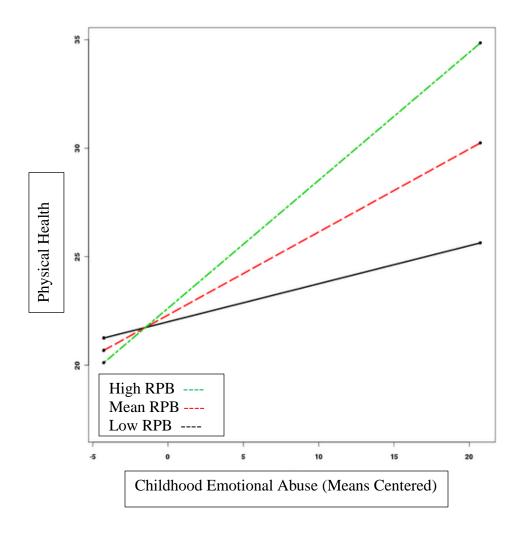




Note: RPB=Religious Practices and Beliefs

Figure 9. The relationship between somatic complaints and childhood sexual abuse in Hispanic women, moderated by religious practices and beliefs

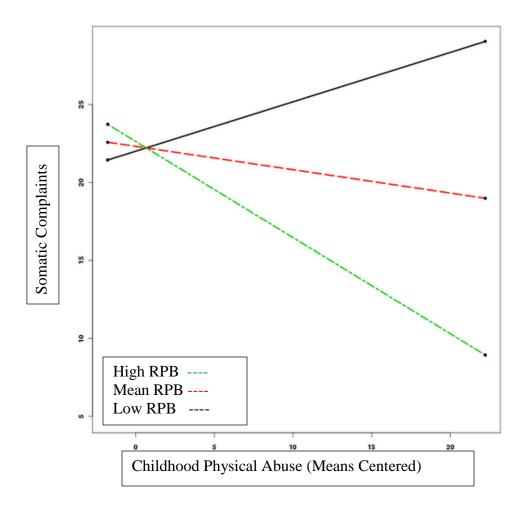




Note: RPB=Religious Practices and Beliefs

Figure 10. The relationship between physical health and childhood emotional abuse in non-Hispanic white women, moderated by religiosity

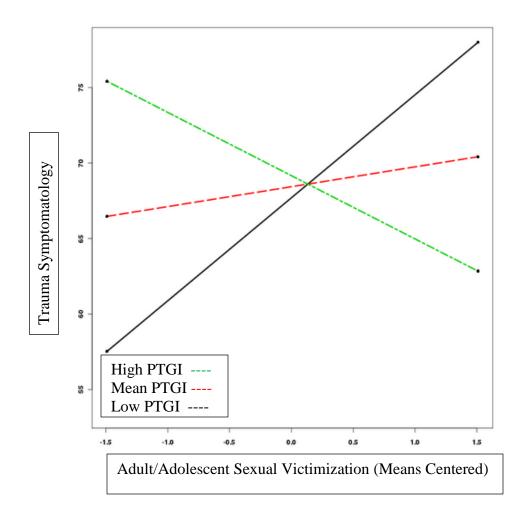




Note: RPB=Religious Practices and Beliefs

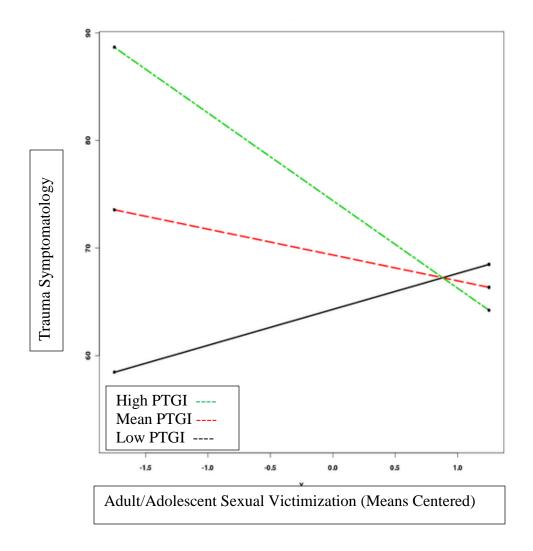
Figure 11. The relationship between somatic complaints and childhood physical abuse in non-Hispanic white women, moderated by religiosity





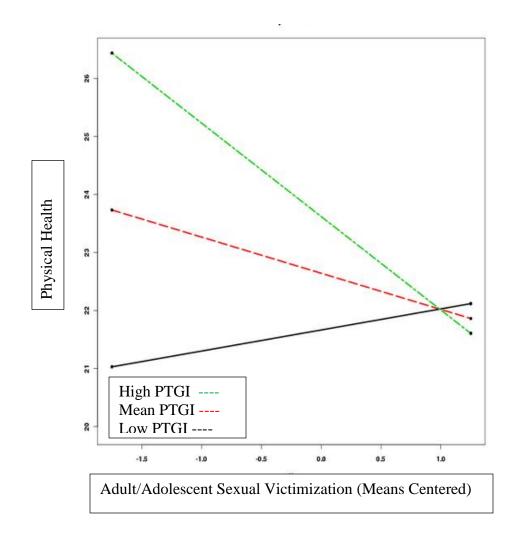
Note: PTGI=Posttraumatic Growth

Figure 12. The relationship between trauma symptomatology and adult/adolescent sexual victimization in Hispanic women, as moderated by posttraumatic growth

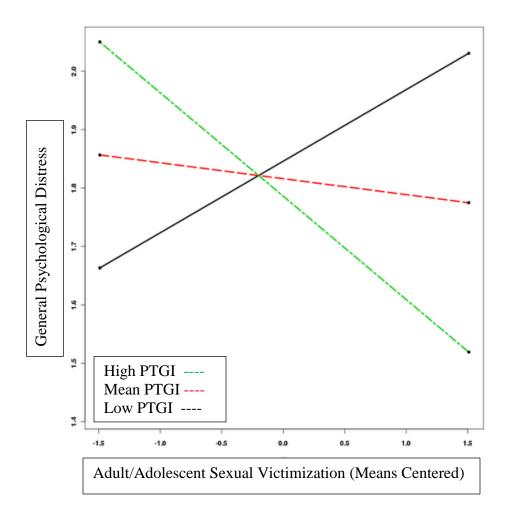


Note: PTGI=Posttraumatic Growth

Figure 13. The relationship between trauma symptomatology and adult/adolescent sexual victimization in non-Hispanic white women as moderated by posttraumatic growth



*Note:* PTGI=Posttraumatic Growth *Figure 14.* The relationship between physical health and adult/adolescent sexual victimization in non-Hispanic white women, moderated by posttraumatic growth



Note: PTGI=Posttraumatic growth

Figure 15. The relationship between general psychological distress and adult/adolescent sexual victimization in Hispanic women as moderated by posttraumatic growth



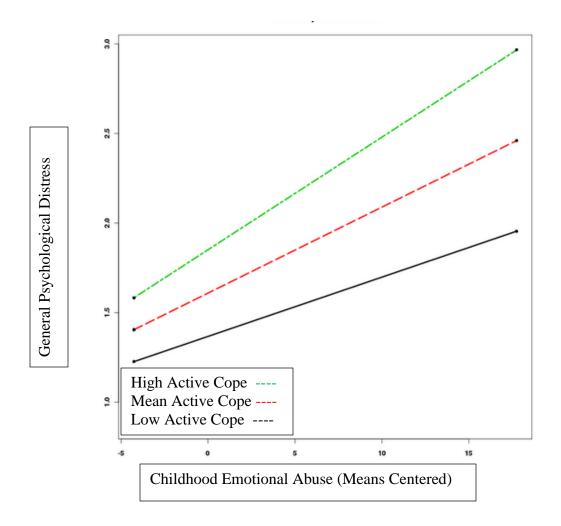


Figure 16. The relationship between general psychological distress and childhood emotional abuse in Hispanic women, moderated by active coping



## References

- Aiken, L. S., & West, S. G. (2001). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: SAGE Publications.
- Bachman, R., Zaykowski, H., Lanier, C., Poteyeva, M., & Kallmyer, R. (2010).Estimating the Magnitude of Rape and Sexual Assault Against American Indian.The Australian and New Zealand Journal of Criminology, 43(2), 199–223.
- Banyard, V., Williams, L., Siegel, J., & West, C. (2002). Childhood Sexual Abuse in the Lives of Black Women. *Women & Therapy*, (February 2013), 37–41. Retrieved from http://www.tandfonline.com/doi/abs/10.1300/J015v25n03\_04
- Bernstein D, Fink L. Childhood Trauma Questionnaire: A Retrospective Self-Report Questionnaire and Manual. San Antonio, TX: Psychological Corp; 1998.
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., & et al. (1996). Initial reliability and validity of a new retrospective measure of child abuse and neglect.
- Briere, J., & Jordan, C. E. (2004). Violence against women: outcome complexity and implications for assessment and treatment. *Journal of Interpersonal Violence*, 19(11), 1252–76. doi:10.1177/0886260504269682
- Bryant-Davis, T., Chung, H., Tillman, S., & Belcourt, A. (2009). From the margins to the center: ethnic minority women and the mental health effects of sexual assault.

  \*Trauma, Violence & Abuse, 10(4), 330–57. doi:10.1177/1524838009339755
- Bryant-Davis, T., Ullman, S. E., Tsong, Y., & Gobin, R. (2011). Surviving the storm: the role of social support and religious coping in sexual assault recovery of African American women. *Violence Against Women*, *17*(12), 1601–18. doi:10.1177/1077801211436138



- Bush, K., & Kivlahan, D. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. *Archives of internal* ..., 10. Retrieved from http://archinte.ama-assn.org/cgi/reprint/158/16/1789.pdf
- Campbell, R., Greeson, M. R., Bybee, D., & Raja, S. (2008). The co-occurrence of childhood sexual abuse, adult sexual assault, intimate partner violence, and sexual harassment: a mediational model of posttraumatic stress disorder and physical health outcomes. *Journal of Consulting and Clinical Psychology*, 76(2), 194–207. doi:10.1037/0022-006X.76.2.194
- Carpenter-Song, E., Whitley, R., Lawson, W., Quimby, E., & Drake, R. E. (2011).

  Reducing disparities in mental health care: suggestions from the Dartmouth-Howard collaboration. *Community mental health journal*, 47(1), 1–13.

  doi:10.1007/s10597-009-9233-4
- Carver, C. . (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, *4*, 92–100.
- Chiesa, A., & Serretti, A. (2011). Mindfulness based cognitive therapy for psychiatric disorders: A systematic review and meta-analysis. *Psychiatry Research*, 187(3), 441-453. doi:10.1016/j.psychres.2010.08.011
- Cloitre, M., Scarvalone, P., & Difede, J. a. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress*, *10*(3), 437–52. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9246651
- Cloitre, M., Stovall-McClough, C., Miranda, R., & Chemtob, C. M. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related



- posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 72, 411–416.doi:10.1037/0022-006X.72.3.411y, 72, 411–416.doi:10.1037/0022-006X.72.3.411Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. Applied Multiple Regression/CorrelationaAnalysis for the Behavioral Sciences (3<sup>rd</sup> Edition). Mahwah, N.J.: Earlbaum & Associates.
- Connors, G. J., Tonigan, J. S., & Miller, W. R. (1996) A measure of religious background and behavior for use in behavior change research. *Psychology of Addictive Behaviors*, 10(2), 90-96.
- Conoscenti, L. M., & McNally, R. J. (2006). Health complaints in acknowledged and unacknowledged rape victims. *Journal of Anxiety Disorders*, 20(3), 372–9. doi:10.1016/j.janxdis.2005.03.001
- Cuevas, C. a, Sabina, C., & Bell, K. a. (2012). The effect of acculturation and immigration on the victimization and psychological distress link in a national sample of Latino women. *Journal of Interpersonal Violence*, 27(8), 1428–56. doi:10.1177/0886260511425797
- Derogatis, L. R., Lipman, R. S., & Covi, L. (2007). SYMPTOM CHECK LIST S C L 90 GROUP PATIENT RATING DAY HOSPITAL.
- Deutskens, E., Jong, A., Ruyter, K., & Wetzels, M. (2006). Comparing the generalizability of online and mail surveys in cross-national service quality research. *Marketing Letters*, *17*(2), 119–136. doi:10.1007/s11002-006-4950-8
- Ebaugh, H. R., & Chafetz, J. S. (2000). Religion and the New Immigrants: Continuities and Adaptations in Immigrant Congregations (p. 297). AltaMira Press. Retrieved



- from http://www.amazon.com/Religion-New-Immigrants-Continuities-Congregations/dp/0742503909
- Ellis, E. M., Atkeson, B. M., & Calhoun, K. S. (1981). An assessment of long-term reaction to rape. *Journal of Abnormal Psychology*, 90(3), 263–6. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/7288021
- Fisher, B. S., Cullen, F. T., Turner, M. G., & Leary, M. Lou. (2000). The Sexual Victimization of Women. *Juvenile Justice*, (Washington, DC), 0. Retrieved from http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:The+Sexual+V ictimization+of+College+Women#0
- Freeman, D. H., & Temple, J. R. (2010). Social Factors Associated with History of Sexual Assault Among Ethnically Diverse Adolescents. *Journal of Family Violence*, 25(3), 349–356. doi:10.1007/s10896-009-9296-6
- Gidycz, C., & Coble, C. (2006). Sexual assault experience in adulthood and prior victimization experiences. *Psychology of Women* ..., (17), 151–168. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1471-6402.1993.tb00441.x/abstract
- Golding, J. (1999). Intimate partner violence as a risk factor for mental disorders: a metaanalysis. *Journal of Family Violence*, *14*(2). Retrieved from http://www.springerlink.com/index/K5713N4325822P24.pdf
- Hart-Johnson, T., & Green, C. R. (2012). The impact of sexual or physical abuse history on pain-related outcomes among Blacks and Whites with chronic pain: Gender influence. *Pain Medicine*, *13*(2), 229-242. doi:10.1111/j.1526-4637.2011.01312.x



- Heiervang, E., & Goodman, R. (2011). Advantages and limitations of web-based surveys: evidence from a child mental health survey. *Social Psychiatry and Psychiatric Epidemiology*, 46(1), 69–76. doi:10.1007/s00127-009-0171-9
- Henderson, C., Evans-lacko, S., Flach, C., & Thornicroft, G. (2012). Responses to Mental Health Stigma Questions: Data Collection Method, *57*(3).
- Hillberg, T., Hamilton-Giachritsis, C., & Dixon, L. (2011). Review of Meta-Analyses on the Association Between Child Sexual Abuse and Adult Mental Health
  Difficulties: A Systematic Approach. *Trauma, Violence & Abuse*, 12(1), 38-49.
  doi:10.1177/1524838010386812
- Hooper, L. M., Marotta, S. a., & Depuy, V. (2009). A confirmatory factor analytic study of the Posttraumatic Growth Inventory among a sample of racially diverse college students. *Journal of Mental Health*, *18*(4), 335–343. doi:10.1080/09638230802522502
- Hovens, J. M., Giltay, E. J., Wiersma, J. E., Spinhoven, P. P., Penninx, B. H., & Zitman, F. G. (2012). Impact of childhood life events and trauma on the course of depressive and anxiety disorders. *Acta Psychiatrica Scandinavica*, *126*(3), 198-207. doi:10.1111/j.1600-0447.2011.01828.x
- Igarashi, H., Hasui, C., Uji, M., Shono, M., Nagata, T., & Kitamura, T. (2010). Effects of child abuse history on borderline personality traits, negative life events, and depression: A study among a university student population in Japan. *Psychiatry Research*, *180*(2-3), 120-125. doi:10.1016/j.psychres.2010.04.029



- Jansen, K. L., Motley, R., & Hovey, J. (2010). Anxiety, depression and students' religiosity. *Mental Health, Religion & Culture*, 13(3), 267–271. doi:10.1080/13674670903352837
- Kalof, L. (2000). Ethnic differences in female sexual victimization. Sexuality & Culture, 22030. Retrieved from http://www.springerlink.com/index/83330058hr8h02u2.pdf
- Kapur, N. a, & Windish, D. M. (2011). Health care utilization and unhealthy behaviors among victims of sexual assault in Connecticut: results from a population-based sample. *Journal of General Internal Medicine*, 26(5), 524–30. doi:10.1007/s11606-010-1614-4
- Kimerling, R., & Calhoun, K. S. (1994). Somatic symptoms, social support, and treatment seeking among sexual assault victims. *Journal of Consulting and Clinical Psychology*, 62(2), 333–40. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/8201071
- Koss, M P, & Gidycz, C. a. (1985). Sexual experiences survey: reliability and validity.

  \*Journal of Consulting and Clinical Psychology, 53(3), 422–3. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3874219
- Koss, M P, Gidycz, C. a, & Wisniewski, N. (1987). The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55(2), 162–70. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3494755
- Koss, Mary P, & Dinero, T. E. (1989). Discriminant Analysis of Risk Factors for Sexual Victimization Among a National Sample of College Women, *57*(2), 242–250.



- Krebs, C. P., Lindquist, C. H., Warner, T. S., Fisher, B. S., & Martin, S. L. (December, 2007). The campus sexual assault (CSA) study. National Institutes of Justice:

  Bureau of Justice Statistics.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (n.d.). The PHQ-15: validity of a new measure for evaluating the severity of somatic symptoms. *Psychosomatic Medicine*, 64(2), 258–66. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11914441
- Lam, C., & Roman, B. (2009). WHEN GRANNY IS THE WOLF: Understanding and Approaching College-aged Female Victims of Acquaintance Rape THE COMPLEX CAUSES OF.
- Latino Religions and Civic Activism in the United States. (2005). (p. 368). Oxford
  University Press, USA. Retrieved from http://www.amazon.com/Latino-Religions-Activism-United-States/dp/0195162285
- Lawson, D. M., Davis, D., & Brandon, S. (2013). Treating complex trauma: Critical interventions with adults who experienced ongoing trauma in childhood.

  \*Psychotherapy\*, 50(3), 331-335. doi:10.1037/a0032677
- Littleton, H., Axsom, D., & Grills-Taquechel, A. E. (2011). Longitudinal evaluation of the relationship between maladaptive trauma coping and distress: examination following the mass shooting at Virginia Tech. *Anxiety, Stress, and Coping*, 24(3), 273–90. doi:10.1080/10615806.2010.500722
- Littleton, H., Grills-Taquechel, A., Buck, K., Rosman, L., & Dodd, J. (n.d). Health Risk Behavior and Sexual Assault Among Ethnically Diverse Women. *Psychology Of Women Quarterly*, *37*(1), 7-21.



- Littleton, H. L., & Grills-Taquechel, A. (2011). Evaluation of an information processing model following sexual assault. *Psychological Trauma: Theory, Research, Practice and Policy*, 3(4), 421–429. doi:10.1037/a0021381
- Lovell, C. (2005). Utilizing EMDR and DBT Techniques in Trauma and Abuse Recovery Groups. In R. Shapiro (Ed.), *EMDR solutions: Pathways to Healing* (pp. 263-282). New York, NY US: W W Norton & Co.
- Lown, E. a, & Vega, W. a. (2001). Intimate partner violence and health: self-assessed health, chronic health, and somatic symptoms among Mexican American women. *Psychosomatic Medicine*, 63(3), 352–60. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11382262
- McCracken, L. M., & Vowles, K. E. (2014). Acceptance and commitment therapy and mindfulness for chronic pain: Model, process, and progress. *American Psychologist*, 69(2), 178-187. doi:10.1037/a0035623
- Malcarne, V. L., Chavira, D. a, Fernandez, S., & Liu, P.-J. (2006). The scale of ethnic experience: development and psychometric properties. *Journal of Personality Assessment*, 86(2), 150–61. doi:10.1207/s15327752jpa8602\_04
- McCabe, J. G., Krauss, D. A., & Lieberman, J. D. (2010). Reality check: A comparison of college students and a community sample of mock jurors in a simulated sexual violent predator civil commitment. *Behavioral Sciences & The Law*, 28(6), 730-750. doi:10.1002/bsl.902
- Mc Elroy, S., & Hevey, D. (2014). Relationship between adverse early experiences, stressors, psychosocial resources and wellbeing. *Child Abuse & Neglect*, *38*(1), 65-75. doi:10.1016/j.chiabu.2013.07.017



- McLeod, G. H., Fergusson, D. M., & Horwood, L. (2014). Childhood physical punishment or maltreatment and partnership outcomes at age 30. *American Journal Of Orthopsychiatry*, 84(3), 307-315. doi:10.1037/h0099807
- Merrill, R. M., & Salazar, R. D. (2002). Relationship between church attendance and mental health among Mormons and non-Mormons in Utah. *Mental Health*, *Religion & Culture*, 5(1), 17–33. doi:10.1080/13674670110059569
- Messman-Moore, T., & Brown, A. (2006). Risk perception, rape, and sexual revictimization: A prospective study of college women. *Psychology of Women* ..., 30, 159–172. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1471-6402.2006.00279.x/full
- Miller, A. B., Schaefer, K. E., Renshaw, K. D., & Blais, R. K. (2013). PTSD and marital satisfaction in military service members: Examining the simultaneous roles of childhood sexual abuse and combat exposure. *Child Abuse & Neglect*, *37*(11), 979-985. doi:10.1016/j.chiabu.2013.05.006
- Nanni, V., Uher, R., & Danese, A. (2012). Childhood maltreatment predicts unfavorable course of illness and treatment outcome in depression: a meta-analysis. *The American Journal Of Psychiatry*, 169(2), 141-151.
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The

  Long-Term Health Consequences of Child Physical Abuse, Emotional Abuse, and

  Neglect: A Systematic Review and Meta-Analysis. *Plos Medicine*, *9*(11), 1-31.

  doi:10.1371/journal.pmed.1001349
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction



- effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*, 437-448.
- Ramisetty-Mikler, S., Caetano, R., & McGrath, C. (2007). Sexual aggression among

  White, Black, and Hispanic couples in the U.S.: alcohol use, physical assault and
  psychological aggression as its correlates. *The American Journal of Drug and Alcohol Abuse*, 33(1), 31–43. doi:10.1080/00952990601082639
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993).

  Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology*, 61(6), 984–91. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/8113499
- Scher, C. D., Stein, M. B., Asmundson, G. J., McCreary, D. R., & Forde, D. R. (2001).

  The childhood trauma questionnaire in a community sample: psychometric properties and normative data. *Journal of Traumatic Stress*, *14*(4), 843–57.

  doi:10.1023/A:1013058625719
- Simoni, J. M., Sehgal, S., & Walters, K. L. (2004). Triangle of Risk: Urban American Indian Women's Sexual Trauma, Injection Drug Use, and HIV Sexual Risk Behaviors. *AIDS and Behavior*, 8(1), 33–45. doi:10.1023/B:AIBE.0000017524.40093.6b
- Simons, L., Burt, C., & Peterson, F. (2009). The effect of religion on risky sexual behavior among college students. *Deviant Behavior*, (February 2013), 37–41.

  Retrieved from

  http://www.tandfonline.com/doi/abs/10.1080/01639620802296279



- Smith, K., Bryant-Davis, T., Tillman, S., & Marks, A. (2010). Stifled voices: barriers to help-seeking behavior for South African childhood sexual assault survivors. *Journal of Child Sexual Abuse*, 19(3), 255–74. doi:10.1080/10538711003781269
- Soper, D.S. (2014). Significance of the Difference between Two Slopes Calculator [Software]. Available from http://www.danielsoper.com/statcalc
- Tedeschi, R. G. (1995). Trauma & transformation: Growing in the aftermath of suffering. *Thousand Oaks*.
- Testa, M., & Livingston, J. a. (2009). Alcohol consumption and women's vulnerability to sexual victimization: can reducing women's drinking prevent rape? *Substance Use* & *Misuse*, 44(9-10), 1349–76. doi:10.1080/10826080902961468
- Testa, M., & Hoffman., J. (2012). Naturally occurring changes in women's drinking from high school to college and implications for sexual victimization. *Journal Of Studies On Alcohol And Drugs*, 73(1), 26-33.
- Tunnard, C., Rane, L. J., Wooderson, S. C., Markopoulou, K., Poon, L., Fekadu, A., & ... Cleare, A. J. (2014). The impact of childhood adversity on suicidality and clinical course in treatment-resistant depression. *Journal Of Affective Disorders*, *152-154*122-130. doi:10.1016/j.jad.2013.06.037
- Ullman, S. E., & Filipas, H. H. (2005). Ethnicity and Child Sexual Abuse Experiences of Female College Students. *Journal Of Child Sexual Abuse*, *14*(3), 67-89. doi:10.1300/J070v14n03•04
- U.S. Department of Justice, Bureau of Justice Statistics (BJS). Data retrieved March 11, 2004, from www.ajp.usdoj.gov/bjs/abstract/cvusst.htm.



- Williams, J. G., Crane, C., Barnhofer, T., Brennan, K., Duggan, D. S., Fennell, M. V., & ... Russell, I. T. (2014). Mindfulness-based cognitive therapy for preventing relapse in recurrent depression: A randomized dismantling trial. *Journal Of Consulting And Clinical Psychology*, 82(2), 275-286. doi:10.1037/a0035036
- Williams, A. M., Galovski, T. E., Kattar, K. A., & Resick, P. A. (2011). Cognitive processing therapy. In B. A. Moore, W. E. Penk (Eds.), *Treating PTSD in military personnel: A clinical handbook* (pp. 59-73). New York, NY US: Guilford Press.
- Vallejo, M. A., Jordán, C. M., Díaz, M. I., Comeche, M. I., & Ortega, J. (2007).
  Psychological assessment via the internet: A reliability and validity study of online (vs paper-and-pencil) versions of the general health questionnaire-28 (GHQ-28) and the Symptoms Check-List-90-Tevised (SLR-90-R). *Journal Of Medical Internet Research*, 9(1), 1-10. doi:10.2196/jmir.9.1.e2
- Widom, C. S., Czaja, S. J., & Dutton, M. A. (2008). Childhood victimization and lifetime revictimization. *Child Abuse & Neglect*, 32(8), 785–96. doi:10.1016/j.chiabu.2007.12.006
- Woodhams, J., Hollin, C. R., Bull, R., & Cooke, C. (2012). Behavior displayed by female victims during rapes committed by lone and multiple perpetrators. *Psychology*, *Public Policy, and Law*, *18*(3), 415–452. doi:10.1037/a0026134
- Wyatt, G. E., Guthrie, D., & Notgrass, C. M. (1992). Differential effects of women's child sexual abuse and subsequent sexual revictimization. *Journal of Consulting and Clinical Psychology*, 60(2), 167–173. doi:10.1037//0022-006X.60.2.167



Young, M.-E. D., Deardorff, J., Ozer, E., & Lahiff, M. (2011). Sexual abuse in childhood and adolescence and the risk of early pregnancy among women ages 18-22. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 49(3), 287–93. doi:10.1016/j.jadohealth.2010.12.019

