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Mental Health and Medication Adherence as a Function of Early Life Physical and Sexual Trauma in HIV+ Latino Men Who Have Sex With Men

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Dedication

I dedicate this accomplishment to my family. It is thanks to them that I have succeeded this far in my education. Papá gracias por tener expectativas muy altas de mi y por impulsarme a siempre seguir adelante para realizar todas mis metas. Gracias por creer en mí. Mami, se que siempre le presume a todo mundo que voy adelantada en la escuela y que se siente orgullosa de mi, pero más orgullosa estoy yo de tenerla a usted en mi vida. Usted me ha inspirado a ser determinada. To my older siblings, Magdalena and Adolfo, thank you for setting the example in pursuing a higher education. Thanks for being my role models! Lastly, to my younger brothers, Armando, Alejandro and Angelica…you're next! We will all be here to support you in every step.

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Abstract

The objective of the study is to understand sexual risk and medication adherence among Latino HIV+ men who have sex with men (MSM) and who have a history of childhood trauma (CT; which may include unwanted sexual experiences, physical threats, physical harm and /or verbal abuse prior to the age of 16). We sampled 150 Latino adult MSM living with HIV at a clinic in El Paso, Texas that offers comprehensive HIV/AIDS services to those living on the U.S.-Mexico Border. We assessed self-reported histories of childhood abuse and participants' control expectancies not only toward sexual impulsivity, but also more generally.

We observed high levels of unwanted childhood sexual experiences (22%). However, we did not find support for our hypothesis that higher levels of fatalism would mediate the relationship between CT and ART adherence. Also, although perceived control over sex drive was significantly negatively correlated with sexual risk, we did not find a significant relationship between unwanted childhood sexual experiences and sexual risk taking. It appears that control expectancies are important in the prediction of sexual risk among this sample of HIV+ Latino MSM.

Results from this sample differed substantially from those obtained with other samples. The absence of a link between childhood trauma and adult functioning, despite high levels of abuse in this sample, is an encouraging finding that may point up the importance of analyzing resilience scores in this population in future studies, to attempt to find protective factors for sexual risk taking among Latino MSM who have experienced CSA.

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Chapter 1: Introduction

1.1 Terminology of CSA

Definitions of child sexual abuse (CSA) vary widely. Most studies analyze CSA as a dichotomous variable based on a variation of the definition provided by Finkelhor (1979), "sexual activities involving a child and an abusive condition such as coercion and/or a large age gap between the perpetrator and child, indicating lack of knowledge/consent from the child." For instance, Rothman and colleagues (2011) in a recent meta-analysis reviewed 75 studies using a definition of sexual abuse as sexual contact prior to the age of 16 with a person who is at least five years older. Another example of a variation of Finkelhor would be the classification of CSA in Doll et al. (1992), "When you were a child or adolescent did someone who was older than you or someone whom you perceived to be more powerful than you ever encourage or force you to have sexual contact with them?"

However, diverging from Finkelhor's definition, Arreola and colleagues (Arreola, Neilands, Pollack, Paul, & Catania, 2005; Arreola, Neilands, Pollack, Paul, & Catania, 2008; Arreola, Neilands, & Díaz, 2009) subdivided CSA experiences into two categories: consensual sex before the age of 16, and forced sex before the age of 16. Carballo-Diéguez and Dolezal (1995) also divided early childhood sexual experiences, forming three groups: 1) Abuse group, formed by men who before age 13 had sex with a partner at least four years their senior and who felt hurt by the experience and/or were unwilling to participate in it; 2) Willing/not hurt group, consisting of men who had an older sexual partner before age 13 but did not feel hurt by the experience and were willing to participate; and 3) No-older-partner group. Other studies have also furthered analyzed CSA history, by assessing frequency of CSA (Brennan, Hellerstedt, Ross, & Welles, 2007; Paul, Catania, Pollack, & Stall, 2001) and/or how upsetting the experience was for the victim (O'Leary, Purcell, Remien, & Gomez, 2003).

1.2 Sexual Minorities and the Prevalence of CSA

Various studies, regardless of the inclusion criteria used to describe CSA, show that a large portion of childhood abuse victims comprises sexual minorities. While the present study focused exclusively on men who have sex with men (MSM), using self-reported sexual behavior to define the sample, a recent meta-analysis found that gay/lesbian/bisexual children and adolescents (defined as children or adolescents with same-sex attraction, same-sex behavior, or those who self-identify as gay or bisexual) were 3.8 times more likely than heterosexuals to report having been sexually abused (Friedman, Marshal, Guadamuz, Wei, Wong, Saewyc, & Stall, 2011). All studies included in this meta-analysis asked whether respondents were forced to have sex, were forcibly touched inappropriately or forced to touch another inappropriately. The meta-analysis also found the mean prevalence for CSA to be 24.5% for bisexual males and 21.2% for gay males, in comparison to 4.64% for heterosexual males.

1.3 MSM and the Prevalence of CSA

One particular sexual minority, MSM, report a high prevalence of CSA. Lloyd and Operio (2012) revealed in a recent meta-analysis that a total of 27.3% (n = 4,263) of the MSM in all included studies (n = 15,622) reported CSA, classified as unwanted sexual experiences before the age of 18. Across the studies that used probabilistic sampling (n = 8,240), the estimated prevalence of CSA was 21.8% (n = 1,800). In a study conducted by Paul and colleagues (2001), 20% of their MSM sample reported CSA, and out of those 20%, more than 80% reported severe CSA experiences. In this study, CSA was classified as a "yes" response when participants were asked if prior to the age of 17, they had "ever been forced or frightened by someone into doing something sexually that you did not want to do" (pg. 565). Severe CSA was defined as having experienced more than five episodes of CSA. Data in this report come from the Urban Men's Health Study, a telephone probability sample of 2,881 MSM in San Francisco, New York, Los Angeles, and Chicago. Paul et al. (2001) reported that in their sample of

MSM, CSA victims were primarily pre-teens during the time of the abuse and their perpetrators were approximately 16 years older than them. Also, over half of the men with a history of abuse in this study reported being sexually victimized frequently by their perpetrators and about 27% reported this abuse to be ongoing for more than a year.

1.4 MSM, Prevalence of CSA and Risk for HIV/AIDS Infection

In the United States, MSM, along with having elevated rates of CSA, carry the burden of a high prevalence of HIV infections. A recent meta-analysis indicated that MSM with a history of CSA were more likely to be HIV positive [odds ratio (OR) = 1.54; 95% confidence interval (CI) = 1.22–1.95)], engage in recent unprotected anal intercourse (OR = 1.85, 95% CI = 1.36–2.51), and report frequent casual male partners in comparison to those who never had any unwanted sexual experiences (Lloyd & Operio, 2012).

Mimiaga et al. (2009) implemented a behavioral intervention trial conducted in 6 U.S. cities over 48 months with a total of 4295 HIV-uninfected MSM participants. The main purpose of the study was to analyze the longitudinal association between CSA and HIV infection. From the total enrolled MSM participants, 39.7% reported a history of CSA. Results from the sample demonstrated that participants with a history of CSA were at elevated risk for HIV infection, displaying higher sexual risk behaviors. There was a significant association between history of CSA and unprotected anal sex (adjusted odds ratio = 1.24, 95% CI: 1.12 to 1.36) and serodiscordant unprotected anal sex (adjusted odds ratio = 1.30, 95% CI: 1.18 to 1.43).

Brandford and colleagues (1994) also found in a sample of 1,001 MSM (who self-identified as gay/bisexual) that those who reported CSA were more likely to have engaged in at least one instance of unprotected sex during the pre-interview period. This sample was recruited from three sexually transmitted disease clinics in Chicago, Denver, and San Francisco, with the purpose of targeting HIV risk behaviors among MSM.

1.5 MSM, Prevalence of CSA and Risk for Substance Use and HIV/AIDS

Alcohol and drug use have been shown to play a role both as outcomes of CSA (Miller, 1999; Stein, Golding, Siegel, Burnam, & Sorenson, 1988) and as correlates of higher sexual risk taking (Beltran, Ostrow, Joseph, 1993; Ekstrand & Coates, 1990; Kelly et al., 1991; McKirnan, Ostrow, & Hope, 1996; O'Reilly et al., 1990; Stall, McKusick, Wiley, Coates, & Ostrow, 1986; Stall, Coates, & Hoff, 1988; St. Lawrence, Brasfield, & Kelly, 1990). Bartholow et al. (1994) reported that men with a history of CSA were also more likely to report use of tobacco, cocaine, crack, stimulants, hallucinogens, and opiates. Also, lifetime intravenous use of substances was reported by about 29% of the men with a history of CSA, in contrast to 14% of non-sexually coerced men, as well as HIV infection indicated by self-report and antibody test data (36% vs. 28% of non-abused were HIV+).

Another study found that those who experienced CSA were more likely to have used tobacco, cocaine, crack, stimulants, hallucinogens, and opiates in their lifetimes (Bradford et al, 1994). In yet another study, MSM participants who had a history of CSA had a harder time maintaining a long-term relationship in comparison to MSM who were never abused, and had a greater number of short-term casual sex partners, as well as one-night stands (Paul et al., 2001). One-night stands occurred more frequently when under the influence of alcohol and/or drugs than when sober. Further, having frequent anal sex along with drug/alcohol use was significantly associated with serodiscordant risk behavior, particularly in the group reporting the highest number of CSA experiences.

Substance use as a maladaptive coping mechanism (a way to achieve cognitive escape) may result in this case since CSA victims may experience physical, emotional and/or psychological trauma from the abuse. CSA may increase feelings of inadequacy and guilt towards sexual experiences, creating negative associations with sexuality. Studies have shown that it may be particularly hard for MSM to feel comfortable with their sexuality and sexual encounters if they have been victim of CSA,

and in turn this discomfort may make safer sex choices very hard to make as an adult (Dimock, 1988; Myers, 1989). In fact, various studies have examined the effect of childhood abuse (physical and sexual) on adult mental health including post-traumatic stress, anxiety, and depressive symptomatology. For example, Allers and Benjack (1991) reported, in a sample of 52 individuals living with HIV/AIDS, that participants who were physically/sexually abused as children (65%; n=34) were more likely to report sexual impulsivity, as well as chronic depression and substance abuse, in comparison to non-abused subjects.

Maladaptive coping through drug/alcohol use may influence unprotected sex by decreasing interpersonal regulatory and risk concerns, while increasing sensation seeking. As stated before, studies have revealed among samples of MSM that CSA victims are more likely to use illicit substances before engaging in sexual activities, and have sex while under the influence of alcohol or other drugs (Hirshfield, Remien, Humberstone, Walavalkar, & Chiasson, 2004; Lloyd & Operio, 2012). From prior studies it seems likely that those reporting sex/drug/alcohol combinations are also those experiencing loss of control over sexual activities (Colfax, Wheeler, Mansergh, Marks, Rader, 2004; Leigh, 1993; Luster & Small, 1994; Stein, Herman, Trisvan, Pirraglia, Engler, & Anderson, 2006).

1.6 Sexual & Ethnic Minorities and the Prevalence of CSA

While there has been relatively little research on sexual minorities who are also racial/ethnic minorities, the literature to date indicates that this is a population subject to multiple stressors, including cultural rejection due to sexual orientation, discrimination, stigma, prejudice, and a higher prevalence of early life physical and sexual trauma. Morris and Balsam (2003), in a large national survey, found higher rates of childhood physical and sexual abuse among ethnic minority lesbian and bisexual women compared to Anglo lesbian and bisexual women. Similarly, three studies of men who have sex with men found higher prevalence rates of CSA among African American and Latino men compared to Non-

Hispanic Whites (Balsam, Lehavot, Beadnell, & Circo, 2010; Doll et al., 1992; Feldman & Meyer, 2007). Sexual and ethnic minorities may be at elevated risk not only compared to Non-Hispanic Whites, but also when compared to their ethnic heterosexual counterparts. Balsam et al. (2004) found higher rates of childhood physical abuse among Native Americans who self-identified as lesbian, gay, or bisexual, in comparison to heterosexual Native Americans (Balsam, Huang, Fieland, Simoni, & Walters, 2004).

Various potential explanations for why sexual and ethnic minorities are at elevated rates of child abuse have been proposed. Some of these explanations are similar to those for childhood abuse in the general population (e.g., additional stress on families and economic disadvantage; Freisthler et al., 2007). Others believe the high prevalence is related to the cultural or religious beliefs within ethnic minority families which may include strong beliefs against homosexuality (Chung & Katayama, 1998).

1.7 Latino MSM and the Prevalence of CSA

Disparities in experiences of CSA have been found in sexual and ethnic minorities, specifically among those of Latino origin. Balsam and colleagues (2010) found, in a sample of 669 sexual minorities, that Latina/o and African American participants reported significantly more physical abuse compared to Anglo participants. Latina/o and African American participants also reported more sexual abuse and a higher frequency of abuse when compared to both Asian American and Anglo participants. There were no significant differences in sexual abuse among African American sexual minorities and Latino sexual minorities. Also, no differences were found in reported levels of emotional abuse across ethnicities.

Compared to Non-Hispanic Whites, Latino men are more likely to have been sexually abused as a child by an extended family member and to have experienced genital fondling and/or anal penetration as a child (AccionMutua, 2005). More specifically, studies have found childhood abuse (physical and

sexual) to be particularly high among Latino MSM (Balsam et al., 2010; Doll et al., 1992; Feldman & Meyer, 2007). Latino MSM seem to be twice as likely to experience CSA, more likely to be younger when the abuse occurred, and more likely to have an age difference of 5 years between themselves and the abuser, in comparison to their white counterparts (Dilorio, Hartwell, & Hansen, 2002; Doll et al., 1992). In fact, a more recent study found in a sample of 2692 MSM from the Urban Men's Health Study who responded to the CSA and ethnicity questions, that Latino MSM were twice as likely to report sexual abuse prior to the age of 13 (22%) when in comparison to non-Latino MSM (11%; Arreola et al., 2005). Latinos in this sample were Mexican (35%), Cuban (6%), Puerto Rican (17%), Other Caribbean (<1%), Central American (7%), South American (8%), European (15%), Other (3%), and Mixed Latino (9%).

High rates of CSA, at young age, were also found in a sample of 182 MSM of Puerto Rican ancestry living in New York City (Carballo-Diéguez & Dolezal, 1995). Results showed that a total of 32(18%) of the 182 adult Puerto Rican MSM reported experiencing CSA, "before age 13, had sex with a partner at least four years their senior and felt hurt by the experience and/or were unwilling to participate in it." Also a total of 33 (18%) participants reported sexual experiences before the age of 13 with a partner at least 4 years older, but having been willing to participate and not been hurt by the experience.

Jinich and colleagues (1998) calculated, in a sample of 1,941 MSM, a prevalence of 39% (95% CI = 31.18, 48.12) CSA in Latino MSM (predominantly of Mexican descent), significantly greater than the 27% (95% CI = 24.97, 29.14) estimated in a sample of non-Latino MSM. Prevalence rates of CSA for Latino MSM in the Jinich et al. (1998) study have been consistently found to be comparable to rates reported in more current studies (Arreola et al., 2005; Arreola, Neilands, & Díaz, 2009).

1.8 Latino MSM, Prevalence of CSA and Risk for HIV/AIDS Infection

Latino MSM in the U.S. also show in various studies the highest rates of unprotected anal intercourse of any other racial or ethnic group in the U.S. (Remien, Wagner, Dolezal, & Carballo-

Dièguez, 2002). For example, Díaz and colleagues (1996) replicated this finding in a sample of 159 Latino MSM, primarily of Mexican descent, recruited from Tucson, Arizona. Also, in Bartholow et al. (1994), Latino men (representing 12% of the sample) were twice as likely to engage in receptive anal sex with steady partners as were Non-Hispanic Whites (73%) and African Americans (12%).

Jarama et al. (2005) reported that in their sample of 250 Latino MSM immigrants (primarily immigrants from El Salvador) residing in Virginia, more than a third had high-risk anal sex without protection in either the insertive or receptive role with a casual partner in the last three months (Jarama, Kennamer, Poppen, Hendricks, & Bradford, 2005). Also in the past three months, 57% and 50% of the Latino MSM in the study reported receiving and giving oral sex to their casual partners, mostly without protection. Participants for this study were recruited in urban and rural U.S. settings, from places frequented by Latino MSM and using snowball methods. Most the study participants were born outside of the U.S., [Central America (47%), South America (21%), Mexico (21%), Puerto Rico (8%), other countries (5%)], and had been in the U.S. 11 years or less. Similarly, Carballo-Diéguez and Dolezal (1995) found among a sample of 182 Puerto Rican MSM, that those who had been victims of sexual abuse during childhood showed greater risk for HIV infection. Efforts were made to include non-gay MSM in addition to gay participants, focusing, as in the current study, on self-reported sexual behavior rather than identity.

Not surprisingly then, Latino MSM seem to be at particularly high risk for HIV/AIDS. A total of 81% of transmissions of HIV in Latino men occur through sex with other men (CDC, 2011a), with Latino MSM becoming infected at younger ages than non-Latinos. In 2009, Latino MSM accounted for 81% (6,000) of new HIV infections among all Latino men and 20% in all MSM, disregarding ethnicity (CDC, 2011). These findings leave open the possibility of a link between CSA and HIV risk behavior as an adult; an issue that should be studied more deeply since the high prevalence of CSA among Latino MSM may help explain why this specific population shows disproportionately higher rates of HIV

infection. In fact, the association between CSA, higher sexual risk behaviors, and high HIV prevalence among samples of MSM has been well-documented in numerous studies (Arreola et al., 2005; Bartholow et al., 1994; Brandford et al., 1994; Carballo-Diéguez & Dolezal, 1995; Doll et al., 1992; Exner et al., 1992; Fergusson & Horwood, 1998; Holmes, 1998; Jamara et al., 2005; Jinich et al., 1998; Lenderking, Wold, Mayer, Goldstein, Losina, & Seage, 1997; O'Cleirigh, Safren, & Mayer, 2012).

1.9 Summary

In summary, we know Latino MSM have a disproportionately higher rate of HIV/AIDS than their non-Hispanic White counterparts and are also more likely than other ethnic groups to have experienced CSA and/or physical abuse. There is reason to believe that sexual impulsivity in MSM who have been victims of CSA increases behaviors that increase the risk for HIV infection. However, there has been relatively little research on sexual minorities who are also racial/ethnic minorities and have been victims of CSA. In fact, literature on Latino MSM who has been victims of CSA is minimal. Yet this research could provide valuable insight for Hispanic health disparities of HIV. The data previously described justify the need to investigate the relative impact of CSA and sexual impulsivity on Latino MSM. Thus, an investigation of Latino MSM living on the U.S.-Mexico Border may yield valuable insight into this rapidly growing population, as well as factors to consider in reducing health disparities.

1.10 Present Study

The present study is a replication and extension project that further analyzes how the development of learned helplessness, low self-efficacy, and overall poor interpersonal regulation, is associated with unwanted sexual experiences in childhood (Abramson, Seligman, & Teasdale, 1978; Accion Mutua, 2005; Bartholow et al., 1994; Paul et al., 2001), and how it can apply not only to adult sexual encounters, but also a broader sense of perceived control. We analyze data from HIV+ Latino

MSM and assess their control expectancies not only toward sexual impulsivity, but also adherence to antiviral medication. There have been numerous studies indicating that helplessness, depression, low self-efficacy and fatalism all may contribute to non-adherence (Christensen, Smith, Turner, Holman, Gregory, & Rich, 1996; Reynolds et al., 2004; Sacco, Wells, Vaughan, Friedman, Perez, & Matthew, 2005; Safren et al., 2009). We compare HIV+ Latino MSM who had been victims of unwanted sexual experiences before the age of 16 to those who were never coerced into sexual activities before the age of 16, and analyze if there were any differences in control expectancies in both adherence to ART medication as well as previously mentioned risky sexual activities.

1.11 Aims and Hypotheses

The objective of the study is to understand the implications for adult psychological and behavioral functioning Latino HIV+ men who have sex with men (MSM) may undergo when having experienced childhood trauma (CT; which may include unwanted sexual experiences, physical threats, physical harm and /or verbal abuse prior to the age of 16) and the implications this might have for their mental health and treatment of HIV.

***H1*:** Participants reporting unwanted sexual experiences before the age of 16 will show greater loss of control over sexual impulses in comparison to those who do not report any history of overtly coerced sexual activity.

***H2*:** Perceived control over sex drive will function as a mediator between unwanted sexual experiences before the age of 16 and higher sexual risk-taking as an adult.

***H3*:** Participants reporting childhood trauma will report an expectancy of low control over life, scoring higher on subscales of fatalism (ineluctable destiny, helplessness, and externality).

***H4*:** A higher frequency of abusive events in childhood (CT) will correlate with higher scores on fatalism.

***H5*:** Participants who report childhood trauma will have lower levels of ART adherence, primarily due to higher levels of fatalism.

Chapter 2: Methods

2.1 Participants

We studied a non-probability sample of 150 HIV+ MSM Latinos of Mexican descent at an HIV primary care clinic. Participants were patients from Centro de Salud Familiar La Fe CARE Center. La Fe CARE Center is a clinic in El Paso, Texas that offers comprehensive HIV/AIDS services to those living on the U.S.-Mexico Border. To be eligible for the study, participants must have been (a) self-identified as Latino/Hispanic, (b) self-identified as MSM, (c) HIV+, (d) currently receiving HIV care at La Fe, (e) eighteen years of age or older, and (f) provide informed consent.

2.2 Measures

A *sociodemographic questionnaire* (Appendix A) was developed to assess date of birth, gender, ethnicity, total household income, education level, size of household, and marital status.

Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001; see Appendix B). The PHQ-9 is a nine-item instrument developed to assess the nine DSM-IV-TR diagnostic criteria for major depression (Kroenke et al., 2001). As a self-report questionnaire it references a reporting period of two weeks, using a four-point response scale: "not at all," "several days," "more than half the days," and "nearly every day." It can be used to tentatively diagnose depressive symptoms and monitor depression over time due to its criterion-based, continuous scoring format. The first estimates of internal consistency reliability for the PHQ-9 were obtained by Kroenke et al. (2001; α=.89 and α=.86) in the original Primary Care and Obstetrics-Gynecology Studies. Huang et al., (2006) later estimated internal consistency of the PHQ-9 in a sample of 974 Hispanics. In this sample, patients who were monolingual Spanish-speakers were administered the Spanish version of the PHQ-9; internal consistency (α) was .80. In other studies of Hispanic samples, the PHQ-9 has been compared to the Short-Form Health Survey for an assessment of criterion-related validity; correlations between subscales

of the SF-20 and PHQ-9 total scores have ranged from.51-.78 (SF-20 and SF-36; Gross et al., 2005, Kroenke et al., 2001; Spitzer, Kroenke, & Williams, 1999; Spitzer, 2000).

Visual Analog Scale (VAS; Amico et al., 2006; Giordano, Guzman, Clark, Charlebois, & Bangsberg, 2004; see Appendix C). To assess adherence to ART medication, we used the visual analog scale (VAS). The visual analog scale is a 10 cm line self-report ratio scale of adherence measured from 0-100%. Participants are asked to mark with an "X" the percentage of doses of all HIV medications taken in the past 30 days. The VAS correlates well with objective measures of adherence such as the prominent one used by the Adult AIDS Clinical Trials Group (AACTG). For example, Amico et al. (2006) found adherence rates were comparable across the AACTG measure (81%) and the VAS (87%). They significantly correlated (r = 0.59) and produced identical classification of optimal (>90%) or suboptimal (<90%) adherence for 66% of patients.

Early Life Physical and Sexual Trauma (see Appendix D). The Early Life Physical and Sexual Trauma measure was a new measure used to analyze childhood trauma; it is based on past measures. Prior to the present study, reliability of this measure was unknown; internal consistency reliability will be reported for the present study in the results section. Unwanted sexual experiences before the age of 16 were assessed following past research; we classified sexual encounters before the age of 16 into three different categories: none, consensual, and forced sex (Arreola et al., 2005; Arreola et al., 2008; Arreola et al., 2009). Participants were asked if they engaged in any sexual experiences before the age of 16. If yes, they were then asked, "Was this sexual experience against your will? (That is, <u>were you forced</u> or <u>frightened</u> by someone into doing something sexually that you did not want to?)." This method allows comparison to existing data sets because it has been used in three of the largest studies documenting prevalence rates of childhood sexual abuse in Latino MSM (Arreola et al., 2005; Arreola et al., 2008; Arreola et al., 2009). Also it is consistent with the U.S. Administration for Children and Families' clinical definitions of sexual abuse which must include either an age time frame (e.g., prior to 16 and

age difference) or non-consent on the part of the victim (U.S. Health and Human Service Department, 2011). Due to the varying definitions of childhood sexual abuse with respect to age of victimization, we utilized non-consent in our assessment. If participants reported no sexual encounters before the age of 16, or if they stated that sexual encounters were consensual, they were given a score of zero.

Next, physical threats and physical harm were assessed using an adaptation of the Sexual and Physical Abuse History Questionnaire (SPAHQ; Leserman, Drossman, & Zhiming, 1995). For each of these and for the child sexual abuse item, frequency of the event/s was assessed on a 4-point scale ("only once," "more than once but not often," "often," or "very often"). The SPAHQ showed evidence of test-retest reliability with an 81% overall agreement on whether a person indicated any sexual abuse (chance-corrected agreement kappa = .63). Results also demonstrated that participants tended to report more abuse on the second administration of the questionnaire (52% abused at T2) than on the first administration of the instrument (41% abused at T1), $z = -3.14$, $p = .002$, $n = 139$, reflecting a 28% increase in abuse reporting at T2.

Following Bremner's et al. (2000) concept of childhood trauma, we created a total abuse measure by summing the "unwanted sexual experiences before the age of 16" questions and the "physical threats, physical harm and /or verbal abuse prior to the age of 16" questions, in order to create a total childhood trauma (CT) measure (Bremner, Vermetten, & Mazure, 2000). Bremner et al. (2000) stated, "The rationale behind this preliminary method for constructing an Index was that the Index should be a measure of the total "burden" of abuse over childhood, that is, a measure of the number of events that occurred, how long and how often they were experienced (pg. 3)." If participants reported no physical abuse and reported either no sexual contact before age 16 or endorsed that all sexual encounters were consensual, they were given a score of zero.

Perceived Control Over Sex Drive (Exner, Heino, Meyer-Bahlburg, & Ehrhardt, 1992; see Appendix E). The perceived control over sex drive 4-item subscale from Exner et al., (1992) was used

to measure patients' expected control over sexual impulses. It consists of four items from the original scale Perceived Sexual Control (PSC). The items: "my sex drive controls my life" (corrected item total correlation; $r = .66$), "I've tried to cut down on casual sex, but I just can't do it" (corrected item total correlation; $r = .66$), "once I get sex on my mind, I can't stop or relax until I've scored" (corrected item total correlation; $r = .67$); and "sex is important to me, but it does not rule my life" (reverse scored; corrected item total correlation; $r = .55$), yield a total Cronbach's alpha of .81 (Cronbach, 1951).

Multi-Dimensional Fatalism Scale (Esparza, 2008; see Appendix F). To measure perceived lack of control over life in general we used the multidimensional fatalism scale developed by Esparza in 2008. Esparza (2008) began the multi-dimensional fatalism scale by retrieving 29 existing fatalism scales, including those most frequently used. They then performed an exploratory factor analysis and obtained as a result five factors: ineluctable destiny, helplessness, externality, luck, and divine control. The Cronbach's alpha for the 30-item multidimensional fatalism scale was .89 overall (including all factors). We used only the scales for ineluctable destiny (e.g., "I have learned that what is going to happen will happen"), helplessness (e.g., "I feel that nothing I can do will change things"), and internality (e.g., "I feel that when good things happen, they happen as a result of my own efforts."- reverse coded to reflect externality) since these subscales are more conceptually relevant to our hypotheses. The Cronbach alphas for these three subscales in the Esparza (2008) study are .76 for ineluctable destiny, .76 for helplessness, and .80 for externality.

This scale was developed simultaneously in English and Spanish in order to obtain linguistic equivalence. After conducting measurement invariance analysis, the measure was shown to be invariant across English and Spanish in its factor structure, loadings, variances, and covariances, suggesting that the multidimensional fatalism scale may be used interchangeably in both the English and Spanish languages.

Simoni Sexual Behavior Questions (SSBQ; see Appendix G). Lastly, sexual risk was assessed with an adapted measure referring to participants' sexual encounters during the past 6 months. It was specified that the measure refers to vaginal or anal sex, but not oral sex, a sexual activity involving substantially lower health risk. Partner type was coded: primary or casual. Partner's HIV status was also assessed: positive, negative, or unknown. For each encounter, we asked whether a condom was used or not. Following the scoring method of Simoni et al. (2004) respondents who answered yes to at least one encounter of unprotected sex were classified as having engaged in unsafe sex. This measure also demonstrated adequate reliability in our sample (see Table 1).

2.3 Procedure

La Fe clinic staff (including medical assistants, nurses, or physicians) recruited participants who they knew are HIV+ Latino MSM; eligibility was verified with completed medical staff assessments (Appendix H). After reviewing eligibility of participants on the medical records, La Fe clinic staff would approach eligible participants for recruitment during their regular clinic appointments. Staff from La Fe were given a $5 incentive for every eligible patient who we were able to contact, regardless of whether the patient consented to participate in the study. Patients who were eligible and showed interest in participating were scheduled for an appointment at La Fe Clinic and interviewed by a bilingual research assistant from the Tertiary Prevention in Behavioral Medicine Laboratory at the University of Texas at El Paso (UTEP).

The research assistants explained the study to the participants and requested their informed consent. After the consent form had been signed, the research assistant assessed participants with a structured interview and survey measures. The session was provided either in English or Spanish, based on the preference of the participant. Participants were given $30 in appreciation of their participation.

2.4 Approach to Analysis

Power Analysis

The most complex analysis for the project involved bootstrapping. Power was estimated from empirical simulation studies of estimated sample size for power set to .80 using a bias-corrected boostrapping approach (Fritz & Mackinnon, 2007). Assuming regression paths (α and β) halfway between small and medium size (.26, or range of variance accounted from 2%-13%) requires a sample size of 148. Our gathered sample of 150 participants provided sufficient power (>.80) with alpha set to .05.

Independent samples T test (H1 & H3)

Two independent samples t-test were used to compare means. We compared participants who reported experiencing unwanted sexual experienced before the age of 16 and those who didn't on scores of sexual impulsivity. Also, we compared participants who reported CT to those who didn't report any incidence of unwanted sexual experiences, physical threats, physical harm or verbal abuse prior to the age of 16 on levels of fatalism.

Correlation (H4)

A correlation analysis was used to test the associations between subscales of fatalism (ineluctable destiny, helplessness, and externality) and frequency of childhood trauma. A positive correlation was expected.

Bootstrapping (H2 & H5)

Bivariate correlations were first computed among relevant variables. To test meditational hypotheses (indirect effects) we used a bootstrap analysis. Bootstrap analysis estimates the sampling

distribution by treating the sample (N=150) as a population (Hayes, 2009; Preacher, Rucker, & Hayes, 2007). The bootstrap re-samples (k=5000) from the sample. This is used to create a 95% confidence interval, using a percentile approach (Preacher et al., 2007). We further improve this method by applying a bias correction since the sampling distribution could have been skewed (Fritz & Mackinnon, 2007). Bootstrap analysis and bias correction was done using SPSS 21 statistical software (IBM Corp., 2012) and a script version of the INDIRECT macro described in Preacher and Hayes (2008).

It was hypothesized that perceived control over sex drive would function as a mediator between unwanted sexual experiences before the age of 16 and higher sexual risk-taking as an adult. Also, it was hypothesized that participants who reported childhood trauma would have lower levels of ART adherence, primarily due to higher levels of fatalism.

Chapter 3: Results

3.1 Sample and Scale Characteristics

Sample. A total of 150 participants took part in the study. However, one participant was excluded after completing the survey. He did not self-identify as MSM, leaving our sample constrained to 149. Also, a total of 9 participants did not have available adherence data (medication not currently prescribed) and thus the adherence analysis is constrained to a sample size of 140. Lastly, we had one participant indicate "yes" to "*Did you have any sexual experiences before the age of 16?*" The participant also indicated "yes" to "*If yes…was this sexual experience against your will? (That is, were you forced or frightened by someone into doing something sexually that you did not want to?)"* However when asked "*Do you remember how old you were when this first occurred?*" The participant wrote "21." Due to the inconsistency, this participant's data were excluded from analysis of CT, leaving our sample for this particular analysis constrained to 148.

Scale Reliability. Internal consistency for the scales and subscales was analyzed to ensure that measures used in this study demonstrated adequate internal consistency reliability indicated by an $\alpha > .70$ (Bernardi, 1994). Cronbach's alpha (Cronbach, 1951) was calculated for each measure of depression, childhood trauma, sexual risk, and fatalism, including the fatalism subscales (see Table 1). To further analyze the Multi-Dimensional Fatalism items, a correlation matrix (see Table 2) was used.

Table 1
Scale Reliabilities and Scores

Scale Name	*Cronbach's Alpha*
Patient Health Questionnaire-9 (9 items)	.92
Simoni Sexual Behavior Questions (4 items)	.74
Early Life Physical and Sexual Trauma (4 items)	.76
Perceived Control Over Sex Drive (4 items)	.65
Multi-Dimensional Fatalism- Total score from all 3 subscales (18 items)	.83
- Internality subscale (6 items)	.71
- Ineluctable Destiny subscale (6 items)	.81
- Helplessness subscale (6 items)	.80

Table 2
Correlation Matrix for the Multi-Dimensional Fatalism Subscales (N=145)

	Ineluctable Destiny	Helplessness	Externality (Internality Reverse Coded)
1. Ineluctable Destiny	--		
2. Helplessness	.617**	--	
3. Externality	-.026	.166*	--

*$p < .05$, ** $p < .01$.

3.2 Descriptive Statistics and Demographic Information

Participant Characteristics. Data from the 149 eligible participants were analyzed and the following descriptive statistics were found. All the sample self-identified as Latino and a total of 97.3% reported being of Mexican descent; 63.8% opted to participate in English. Participants' average age at the time of the interview was 43.6 years (*SD*= 11.8, median= 44). Participants reported an average of 10.5 years living with HIV (SD= 7.5, median= 9). Employment status was low, with 19.5% working a full-time job, 12.8% working part-time, 8.1% working odd jobs, and 59.7% currently unemployed. The median household annual income of participants was $12,000 (SIQR = $6,400).

A total of 45% reported being in a committed relationship with a primary partner; 14.9% reported being with their primary partners for more than 5 years and 22.4% reported over 10 years. A large majority (95.5%) reported their primary partner being male. From the sample, 75.8% of the participants self-identified as exclusively gay. The majority of the participants were currently renting (38.3%) or were homeowners (27.5%). The majority of participants self-identified as Christian-Catholic (61.1%) and very few reported not identifying with any religion (14.8%). Also, very few reported living in Mexico in the last 12 months (12.8%). Frequencies and percentages can be found in Table 3.

3.3 Prevalence of Early Life Physical and Sexual Trauma

Childhood Trauma. We assessed childhood sexual abuse following the method employed by Arreola and colleagues (2008), consensual versus nonconsensual before the age of 16. We also assessed for incidents of physical threats, physical abuse and verbal abuse before the age of 16, using a dichotomous response scale (Yes or No). A total of 66.2% of participants reported having sexual experiences prior to the age of 16, with 22.3% reporting these sexual experiences being non-consensual (see Appendix D: "*If yes…was this sexual experience against your will? (That is, were you forced or frightened by someone into doing something sexually that you did not want to?)*" The average age of

CSA (nonconsensual sexual experiences before the age of 16) was 9.03 (*SD* = 3.02). Frequencies and percentages can be found in Table 4.

Table 3
Participant Characteristics (N = 149)

Demographics	*Mean*	*Frequency*	*%*
Age (Years)	42.2		
Years living with HIV	10.45		
Annual Household Income	$16,387		
Language Preference			
Spanish		54	36.2
English		95	63.8
Residency			
Homeowner		41	27.5
Renting		57	38.3
Living in family home		39	26.2
Living in non-family home		12	8.0
Employment Status			
Full-time		29	19.5
Part-time		19	12.8
Odd jobs		12	8.1
Not currently working		89	59.7
Sexual Orientation			
Heterosexual only		3	2.0
Heterosexual somewhat		2	1.3
Heterosexual/Gay equally		16	10.7
Gay somewhat more		3	2.0
Gay mostly		12	8.1
Gay only		113	75.8
Relationship Status			
Not in a committed relationship		82	55
In a committed relationship		67	45
With a Man		64	95
With a Women		3	5
Religious Preference			
Catholic		91	61.1
Other Christian		20	13.4
Other		16	10.7
Do not identify with any religion		22	14.8

Table 4
Unwanted Sexual Experiences
Descriptive Statistics (N = 148)

	Frequency	*Percent of Total Sample*
1. Any sexual experiences prior to the age of 16?	Yes = 98 No = 50	66.2 33.8
2. Was sexual experience nonconsensual?	Yes = 33	22.3
2a. Nonconsensual experiences occur more than once?	Yes = 26	17.6

Childhood Trauma Descriptive Statistics (N = 149)

3. Ever been physically threatened before the age of 16...?	Yes = 39 No = 110	26.2 73.8
4. Ever been physically hurt before the age of 16...?	Yes = 46 No = 102	31.1 68.9
5. Ever been verbally harmed before the age of 16...?	Yes = 78 No = 70	52.7 47.3

3.4 Hypothesis 1

H1: *Participants reporting unwanted sexual experiences before the age of 16 will show greater loss of control over sexual impulses in comparison to those who do not report any history of overtly coerced sexual activity.*

An independent-samples t-test was conducted to compare perceived control over sex drive in participants with any history of childhood sexual abuse and participants with no history of childhood sexual abuse. Although the direction was as hypothesized, the effect size was small (Cohen's d; Becker,

1998) and there was not a statistically significant difference in the scores for perceived control over sex drive for participants with any history of childhood sexual abuse (see Table 5).

Table 5
Childhood Sexual Abuse and Perceived Control Over Sex Drive (N = 148)

Independent Samples t-test	*Mean (SD)*	*t*	*d*	*df*	*p*
No History of Unwanted Sexual Experiences (*n*= 115)	15.81 (3.11)	-1.00	.20	135	.32
Previous History of Unwanted Sexual Experiences (*n*= 33)	15.11 (3.75)				

3.5 Hypothesis 2

H2: *Perceived control over sex drive will function as a mediator between unwanted sexual experiences before the age of 16 and higher sexual risk-taking as an adult.*

Sexual risk was assessed over the past 6 months; a total of 54.4% of the sample reported unprotected sex with their main partner, 21.5% reported unprotected sex with a casual HIV-positive partner, 12.8% reported unprotected sex with a casual HIV-negative partner, and 16.6% reported unprotected sex with a casual partner whose HIV status was unknown. Frequencies and percentages of higher sexual risk taking as an adult among the sample of HIV+ MSM can be found in Table 6. To test the hypothesized relationship, bivariate correlations were first computed among relevant variables (see Table 7). As expected, perceived control over sex drive was significantly negatively correlated with sexual risk (r=-.247, p=.004). A bootstrapping re-sampling approach was used to test our mediating hypotheses (k= 5,000 bootstrap samples; see Figure 1). As before, perceived control over sex drive was predictive of sexual risk taking [b path (direct effect of mediator on dependent variable [DV]), b = -.24, p <.01. However, we did not find support for our hypothesis that perceived control over sex drive would

mediate the relationship between unwanted sexual experiences before the age of 16 and higher sexual risk taking. In fact, we did not find a significant relationship between the total effect of unwanted sexual experiences before the age of 16 (IV) and sexual risk taking (see Figure 1; c path, b = -.028, p=.74, ns) as seen in prior studies. Therefore, while we proceeded with the analysis of Hypothesis 2, we did not expect the mediation effect to be significant (see Figure 1).

Table 6
Sexual Risk Taking (N = 149)

	Frequencies	*%*
Total Sexual Risk Taking		
• 0	63	42.3
• 1	48	32.3
• 2	17	11.4
• 3	9	6.0
• 4	12	8.1
Unprotected Sex with Main Partner	Yes = 81	54.4
	No = 68	45.6
Unprotected Sex with HIV+ Casual Partner	Yes = 32	21.5
	No = 117	78.5
Unprotected Sex with HIV- Casual Partner	Yes = 19	12.8
	No = 130	87.2
Unprotected Sex with HIV (Unknown) Casual Partner	Yes = 25	16.8
	No = 124	83.2

Table 7
Unwanted Sexual Experiences, Perceived Control Over Sex Drive, and Sexual Risk Correlations (N=137)

	Unwanted Sexual Experiences before 16yrs old	Perceived Control Over Sex Drive	Sexual Risk Total
Unwanted Sexual Experiences before 16yrs old	--		
Perceived Control Over Sex Drive	-.082	--	
Sexual Risk Total	-.029	-.247**	--

*$p < .05$, $p < .01$**

Figure 1

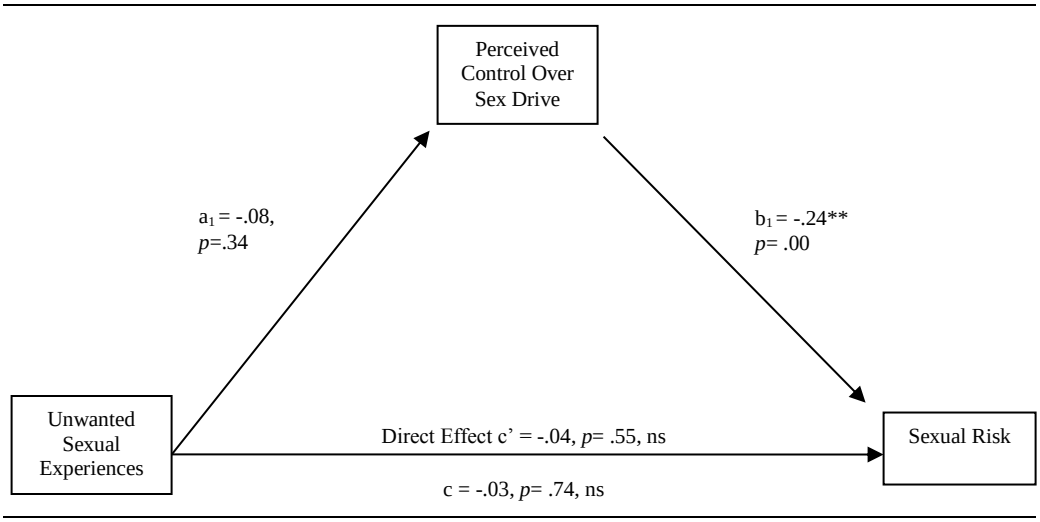

Figure 1. Unwanted Sexual Experiences, Perceived Control Over Sex Drive, and Sexual Risk. *p < .05, p < .01**. k = 5,000 bootstrapped samples. All path coefficients are standardized estimates. 95% confidence intervals for tests of statistically significant indirect effects; bias corrected and accelerated CI: [-.01, .08].

3.6 Hypothesis 3

H3: *Participants reporting childhood trauma will report an expectancy of low control over life, scoring higher on subscales of fatalism (ineluctable destiny, helplessness, and externality).*

An independent-samples t-test was conducted to compare fatalism scores in participants with any history of childhood trauma (which may include unwanted sexual experiences, physical threats, physical harm and /or verbal abuse prior to the age of 16) and participants with no such history. It was hypothesized that participants with a history of childhood trauma would score higher on the Multi-Dimensional Fatalism measure (total score from all 3 subscales; ineluctable destiny, helplessness, externality) indicating an expectancy of low control over life. However, this difference in scores was not significant. Participants with a history of childhood trauma (M = 26.11, SD= 11.30) and participants with no history of childhood trauma (M = 26.13, SD= 10.07) did not differ substantially; t(141)= -.01, d=.00, p= .99. These results suggest that childhood trauma does not have an effect on total fatalism, defined as sum of ineluctable destiny, helplessness, and externality subscales (see Table 8). To

further analyze this hypothesis, independent samples t-tests were conducted on the individual subscales of fatalism; ineluctable destiny, helplessness, and externality (see Table 8). The helplessness subscale was the only fatalism assessment with results in the hypothesized direction; although not statistically significant, participants with a history of childhood trauma scored higher on the helplessness subscale than did participants with no history of childhood trauma.

Table 8
Childhood Trauma and the Multi-Dimensional Fatalism Measure (N = 148)

Independent Samples t-test	*Mean (SD)*	*t*	*d*	*df*	*p*
Total score from all 3 subscales					
No History of Childhood Trauma	26.13 (10.07)	-.01	.00	141	.99
History of Childhood Trauma	26.11 (11.30)				
Ineluctable Destiny Subscale					
No History of Childhood Trauma	12.78 (5.2)	-.2.18	.03	141	.83
History of Childhood Trauma	12.57 (6.0)				
Helplessness Subscale					
No History of Childhood Trauma	7.05 (5.04)	1.35	-.23	141	.18
History of Childhood Trauma	8.25 (5.23)				
Externality Subscale					
No History of Childhood Trauma	6.29 (4.40)	-1.47	.25	141	.14
History of Childhood Trauma	5.29 (3.62)				

3.7 Hypothesis 4

H4: *A higher frequency of abusive events in childhood (CT) will correlate with higher scores on fatalism.*

Childhood Trauma did not significantly correlate with the Multi-Dimensional Fatalism- Total score from all 3 subscales, nor any of the subscales (see Table 9).

Table 9
Correlations for Childhood Trauma and the Multi-Dimensional Fatalism (N=143)

	Childhood Trauma	Multi-Dimensional Fatalism- Total Score	Ineluctable Destiny	Helplessness	Externality (Internality Reverse Coded)
1. Childhood Trauma	--				
2. Multi-Dimensional Fatalism- Total Score	.07	--			
3. Ineluctable Destiny	.03	.82**	--		
4. Helplessness	.15	.865**	.631**	--	
5. Externality (Internality Reverse Coded)	-.05	.422**	-.027	.148	--

*$p < .05$, $p < .01$**

3.8 Hypothesis 5

H5: *Participants who report childhood trauma will have lower levels of ART adherence, primarily due to higher levels of fatalism.*

To test this relationship, bivariate correlations were first computed among relevant variables. There was a marginally significant negative correlation between childhood trauma and ART adherence; $r(132) = -.163$, $p=.06$. A bootstrapping re-sampling approach was used to test our mediating hypotheses (k= 5,000 bootstrap samples; see Figure 2) using SPSS 21 statistical software (IBM Corp., 2012) and a script version of the INDIRECT macro described in Preacher and Hayes (2008). We did not find support for our hypothesis that higher levels of fatalism would mediate the relationship between CT and ART adherence. No paths were significant, indicating no relationship.

Figure 2

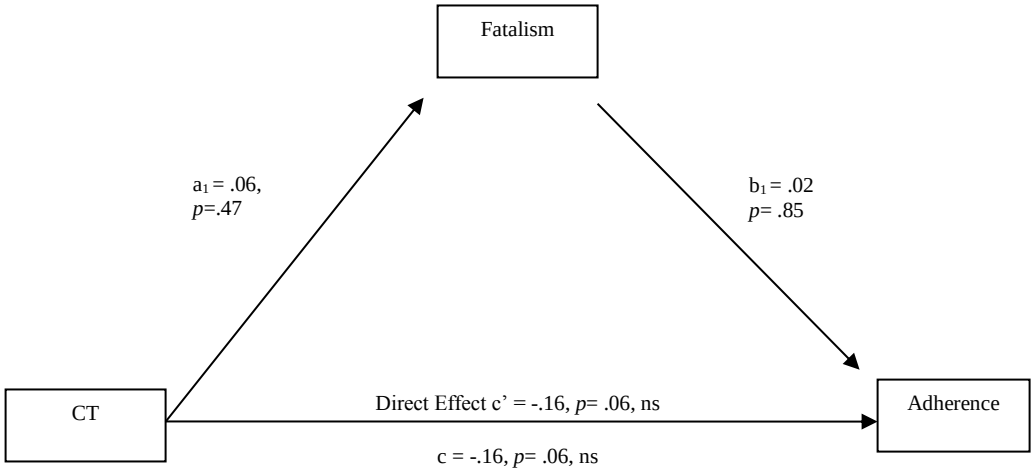

Figure 2. Childhood Trauma, Fatalism, and ART adherence. *$p < .05$, $p < .01$**. $k = 5{,}000$ bootstrapped samples. All path coefficients are standardized estimates. 95% confidence intervals for tests of statistically significant indirect effects; bias corrected and accelerated CI: [-.01, .05].

Chapter 4: Discussion

4.1 Implications

These results suggest that if any effect of CSA on perceived control over sex drive exists, it is minimal and not reliable enough to detect with a sample of this size. Also, although perceived control over sex drive was significantly negatively correlated with sexual risk, we did not find a significant relationship between unwanted sexual experiences before the age of 16 (IV) and sexual risk taking. However, it appears that control expectancies are important in the prediction of sexual risk among this sample of HIV+ Latino MSM. Of course, the direction of effect is unclear in this relationship, but it does suggest the presence of insight into the likelihood of risk behavior on the part of participants, along with a potential target for intervention efforts.

CT did not significantly correlate with fatalism (see Table 9). We also did not find support for our hypothesis that higher levels of fatalism would mediate the relationship between CT and ART adherence. No paths were significant in our model, indicating no relationship. However, the correlation matrix we computed with our sample of HIV+ Latino MSM differed from that for the original college student sample; Esparza (2008) found all subscales to be positively correlated at $p<.01$. Thus, it may be the case that fatalism is portrayed differently in clinic samples.

4.2 Strengths and Limitations

To date, very few data exist on CSA among Latino men who have sex with men and many fewer data are available on HIV+ Latino MSM who have experienced unwanted sexual experiences. Data from this hard-to-reach and understudied sample on the U.S.-Mexico Border therefore provide a new perspective in the literature. However this was a convenience sample of participants of Mexican descent and very low socioeconomic status. Thus, generalizations must be drawn cautiously from the current study.

Also, it must be noted that the cross-sectional design does not allow us to imply causal relationships among our predictor and outcome variables; only associations and predicted patterns can be discussed. For example, we cannot assure that perceived control over sex drive causes sexual risk to occur because perceived control may be altered by actual sexual behavior or a third variable may be in play (e.g., self-esteem/personality). Lastly, a significant limitation of our study was the relatively small sample size; some null results may have been a function of low statistical power. However, most effects were so small that it is unlikely that sample size was the issue.

Finally, while the present study employed several well-established and well-validated measures of key constructs, it also employed several measures adapted specifically for use in the current study. While those adapted measures demonstrated adequate internal consistency reliability, they may have been lacking in important psychometric properties other than face validity. Future work should include formal tests of their validity to rule out psychometric concerns as an explanation for the current null findings.

4.3 Conclusions and Future Directions

Results from this sample differed substantially from those obtained with other samples. For instance, unwanted sexual experiences before the age of 16 (IV) did not relate to sexual risk taking as an adult in this sample. This encouraging finding points up the importance of analyzing resilience scores in this population in future studies, to attempt to find protective factors for sexual risk taking among MSM of Mexican descent who have experienced CSA. In various studies avoidant coping behavior has had a significant negative relationship with resilience, the ability of an individual to "bounce back" from a stressful event. Thus, resilience can also be viewed as the degree of successful stress-coping ability. According to Ozer et al. (2008), more than half of the population will experience a traumatic life event that meets DSM-IV PTSD Criterion A2 (i.e., responding to a stressor with fear, helplessness or horror;

Ozer, Best, Lipsey, & Weiss, 2008). However, prevalence estimates of individuals who go on to meet criteri for PTSD diagnosis are much lower.

Despite experiencing a traumatic life event (e.g., CSA), there have been many individuals capable of adapting to the stressor (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004). Resilience is a key area of research in understanding how Latino MSM successfully adapt from a history of CSA (Finkelhor, 1984; Watkins & Bentovim, 1992). However, what is known about MSM with CSA histories today is limited. Qualitative research has suggested several themes regarding resilience in males who have experienced CSA (Andersen & Teicher 2008; Kia-Keating, Grossman, Sorsoli, & Epstein, 2005). Themes included an existence of a safe home environment, religion/spirituality, divergence from traditional norms of masculinity, adoption of a new notion of masculinity and both self-acceptance and family acceptance of the new notion. A number of these themes align with important aspects of Mexican culture. Thus, in addition to methodological improvements, future studies might integrate analyses of resilience, culture, and specific potentially culture-bound mediators of any resilient outcomes. These might include scales tapping religious beliefs and coping, family cohesion, and machismo, In addition mixed methods may be applied to provide further insight into the mechanisms behind quantitative findings.

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Appendix A

Demographic Survey in English and Spanish

Respondent ID code: _____ **Location of Interview: _____**
Date of Interview:_____ **Name of Interviewer: _____**
Time of Interview: _____ **Language of Interview: _____**
Referral Source: _____

1. What is your date of birth? _____ _____ / _____ _____ / _____ _____ _____ _____
(Month) *(Day)* *(Year)*

2. Are you of Mexican descent?
Yes ☐ No ☐

3. Where do you currently live?
☐ A house, apartment, condo or room you rent
☐ A house, apartment, or condo you own
☐ A family member's house, apartment, or condo
☐ Someone else's house, apartment, or condo (that is not family)
☐ Shelter /group home
☐ Other: _____ *[write in your response]*

4. In your current living situation, with whom do you live? *[Check all that apply]*
☐ Spouse or Partner
☐ Children
☐ Parents
☐ Other family
☐ Friends
☐ Roommates
☐ Alone (by myself)

5. How many other people, not including yourself, do you live with? _____

6. In the past 12 months, have you lived in Mexico for any part of the time?
Yes ☐ No ☐

7. What is your highest level of education: _____

8. Please check the box that best describes your employment status.
☐ Working at a full-time job
☐ Working at a part time job
☐ Working odd jobs
☐ Not currently working

9. What kind of work do you do, or if you are unemployed, what kind of work have you done in the past?

_____

10. Altogether, what is your annual household income from all sources?
(*Including welfare, wages, food stamps, child support, and legal/illegal activities)*

$_____

11. How do you think of yourself?

☐	☐	☐	☐	☐	☐	☐
Heterosexual	Heterosexual mostly	Heterosexual somewhat more	Heterosexual equally	Hetero/gay	Gay some-what more	Gay mostly	Gay only

12. Are you currently in a committed relationship with a primary partner?

☐ No……→ (go to question 13)
☐ Yes

12a. Is your current primary partner…?
☐ A man
☐A woman

12b. How long have you been involved with your primary partner?
☐ Less than 6 months
☐ 6 months to 1 year
☐ 1 to 5 years
☐ 6 to 10 years
☐ More than 10 years

12c. Are you currently living with your primary partner?
Yes ☐ No ☐

12d. Are you currently legally married to this primary partner?
Yes ☐ No ☐

12e. Are you currently legally married to someone who is not your primary partner?
Yes ☐ No ☐

12f. What is your partner's highest level of education? _____

12g. What is your partner's occupation? _____

13. Have you ever been divorced?
Yes ☐ No ☐

14. What is your religious preference?
☐ I do not identify with any religion
☐ Catholic
☐ Other Christian
☐ Other_____

15. Date of HIV diagnosis: (MM/DD/YY)_____/_____/_____
(Use 15th day of month if exact day is unknown)

Respondent ID code: _____ **Location of Interview: _____**
Date of Interview:_____ **Name of Interviewer: _____**
Time of Interview: _____ **Language of Interview: _____**
Referral Source: _____

1. ¿Cuál es su fecha de nacimiento? ___ ___ / ___ ___ / ___ ___ ___ ___
(Mes) (Día) (Año)

2. ¿Es usted de origen mexicano?
Sí □ No □

3. ¿Dónde vive usted actualmente?
□ Casa, departamento, condominio o cuarto que usted renta
□ Casa, departamento o condominio de su propiedad
□ Casa, departamento o condominio de un familiar
□ Casa, departamento o condominio de alguna otra persona (que no sea familiar)
□ Casa de Albergue/Hogar de Grupo
□ Otro: _____ [*anote su respuesta*]

4. En el sitio, donde usted vive actualmente, ¿con quién vive? [*Marque todas las que correspondan*]
□ Cónyuge o Pareja
□ Hijos
□ Padres
□ Otros familiares
□ Amigos
□ Compañeros de Cuarto
□ Solo (por mi cuenta)

5. Sin incluirse usted, ¿Con cuántas otras personas vive? _____

6. Durante los últimos doce meses, ¿ha vivido en México por algún tiempo?
Sí □ No □

7. ¿Cuál es su nivel más alto de educación?_____

8. Por favor marque el cuadro que mejor describa su situación laboral.
□ Trabajo de tiempo completo
□ Trabajo de tiempo parcial
□ Trabajo esporádico
□ No trabajo actualmente

9. ¿Qué tipo de trabajo hace, o si es desempleado, que tipo de trabajo ha hecho en el pasado?

_____

10. En total, ¿cuál es el ingreso familiar anual de su hogar incluyendo todas las fuentes de ingreso?
(Incluyendo asistencia social (welfare), salario, food stamps, child support, actividades legales o ilegales)

$_____

11. ¿Cómo piensa usted de sí mismo?

□	□	□	□	□	□	□
Heterosexual Únicamente	Mayormente heterosexual	Un poco mas heterosexual	Hetero/ homosexual Por igual	Un poco mas homosexual	Mayormente homosexual	Homosexual únicamente

12. ¿Se encuentra usted actualmente en una relación de compromiso con una pareja principal?

- ☐ No……→ (pase a la pregunta 13)
- ☐ Sí

12a. ¿Su pareja actual es…?

- ☐ Hombre
- ☐ Mujer

12b. ¿Por cuánto tiempo ha estado involucrado con su pareja principal?

- ☐ Menos de 6 meses
- ☐ 6 meses a 1 año
- ☐ 1 a 5 años
- ☐ 6 a 10 años
- ☐ Más de 10 años

12c. ¿Está viviendo actualmente con su pareja principal?

Sí ☐ No ☐

12d. ¿Está legalmente casado con esta pareja principal?

Sí ☐ No ☐

12e. ¿Está legalmente casado con alguien que no es su pareja principal?

Sí ☐ No ☐

12f. ¿Cuál es el grado de educación más alto de su pareja?_____

12g. ¿Cuál es la ocupación de su pareja?_____

13. ¿Se ha divorciado alguna vez?

Sí ☐ No ☐

14. ¿Cuál es su preferencia religiosa?

- ☐ No me identifico con ninguna religión
- ☐ Católico
- ☐ Otra que es Cristiana
- ☐ Otra religión: _____

15. Fecha del diagnostico del HIV (VIH): (MM/DD/YYYY) _____/_____/_____
(Use el 15 del mes si no sabe el día exacto)

Appendix B

Patient Health Questionnaire-9 in English and Spanish

PHQ-9: Over the last 2 weeks, how often have you been bothered by any of the following problems? Please circle the number that best corresponds.

	Not at all	Several Days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

If you checked off *any* problems, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?

□ Not difficult at all	□ Somewhat difficult	□ Very difficult	□ Extremely difficult

PHQ-9: Durante las últimas 2 semanas, ¿Qué tan seguido le han afectado cualquiera de los siguientes problemas? Marque con un círculo el número con la respuesta que sea más adecuada para usted.

	Para nada	Varios días	Más de la mitad de los días	Casi todos los días
1. Poco interés o placer en hacer las cosas	0	1	2	3
2. Se ha sentido decaído, deprimido, o sin esperanzas	0	1	2	3
3. Dificultad para dormer o permanecer dormido o ha dormido demasiado	0	1	2	3
4. Se ha sentido cansado o con poca energía	0	1	2	3
5. Con poco apetito o ha comido en exceso	0	1	2	3
6. Se ha sentido mal con usted mismo – o que es un fracaso o que ha quedado mal con usted mismo o con su familia	0	1	2	3
7. Ha tenido dificultad para concentrarse en cosas tales como leer el periódico o ver televisión	0	1	2	3
8. ¿Se ha estado moviendo o hablando tan lento que otras personas podrían notarlo?, o por el contrario – ha estado tan inquieto o agitado, que se ha estado moviendo mucho más de lo normal	0	1	2	3
9. Ha pensado que estaría mejor muerto o se le ha ocurrid lastimarse de alguna manera	0	1	2	3

Si usted marcó cualquiera de estos problemas, ¿Qué tan difícil fue hacer su trabajo, las tareas del hogar o llevarse bien con otras personas debido a tales problemas?

□ Para nada difícil	□ Un poco difícil	□ Muy difícil	□ Extremadamente difícil

Appendix C

Self-Reported Adherence to Medications and Medical Appointments in English and Spanish

ATMB

Place an “X” on the line below at the point showing your best guess about how much medication you have taken in the last month. We would be surprised if this was 100% for most people (e.g. 0% means you have taken no medication; 50% means you have taken half of your medication; 100% means you have taken every single dose of your medication).

l------l------l------l------l------l------l------l------l------l------l------l

0% 50% 100%

ATMB

En la línea debajo marque con una “X” el lugar que mejor representa la cantidad de sus medicamentos que ha tomado en el último mes. Nos sorprendería si fuera 100% para la mayoría de las personas (por ejemplo: 0% significa que no ha tomado ningún medicamento; 50% significa que ha tomado la mitad de sus medicamentos; 100% significa que ha tomado cada dosis de todos sus medicamentos).

l------l------l------l------l------l------l------l------l------l------l------l

0% 50% 100%

Appendix D

Early Life Physical and Sexual Trauma Measure in English and Spanish

PST: Below are some questions referring to specific events of harm or abuse prior to the age of 16. We ask that you please answer as honestly as possible.

1) Did you have any sexual experiences before the age of 16?	□ Yes □ No **If NO, then skip to question 6.** **If YES, please answer question 2.**
2) If **YES**…was this sexual experience against your will? (**That** is were you forced or frightened by someone into doing something sexually that you did not want to?)	□ Yes □ No
3) Do you remember how old you were when this first occurred?	Please write age _____
4) Did these sexual experiences occur more than once?	□ Yes □ No If **YES**, how often? □ More than Once □ Often □ Very Often
5) Did anyone ever physically threaten to harm you before the age of 16? (*That is, threaten to physically hit or beat you with the intent to cause you serious pain.)*	□ Yes □ No If **YES**, how often? □ Only once □ More than once but not often □ Often □ Very Often

6) Did anyone ever physically <u>hurt</u> you before the age of 16? (*That is, <u>actually</u> physically hit you with the intent to cause you serious pain.)*	□ Yes □ No <u>If **YES**, how often?</u> □ Only once □ More than once but not often □ Often □ Very Often
7) Did anyone ever <u>verbally harm</u> you before the age of 16? (*That is, <u>say hurtful things</u> to you or about you with the intent to cause you emotional pain.)*	□ Yes □ No <u>If **YES**, how often?</u> □ Only once □ More than once but not often □ Often □ Very Often

PST: A continuación se encuentran algunas preguntas que se refieren a eventos específicos sobre daños o abusos previos a los 16 años de edad. Le pedimos que responda de manera honesta.

1) ¿Tuvo experiencias sexuales antes de los 16 años de edad?	□ Si □ No **Si su respuesta es NO, pase a la pregunta 6.** **Si su respuesta es sí, responda la pregunta 2.**
2) Si su respuesta es **SÍ**… ¿fue/ron esta/s experiencia/s sexual/es en contra de su voluntad? (Es decir, fue forzado o atemorizado por alguien para que hiciera algo de naturaleza sexual que usted no quería hacer)	□ Si □ No
3) ¿Recuerda qué edad tenía cuando sucedió esto por primera vez?	Anote la edad _____
4) ¿Se dieron más de una vez estas experiencias sexuales?	□ Si □ No Si su respuesta es **SÍ**, ¿con qué frecuencia? □ Más de una vez, pero no con frecuencia □ Con frecuencia □ Con mucha frecuencia
5) ¿Alguna vez antes de los 16 años de edad, alguien lo amenazó físicamente con lastimarlo? (Es decir, amenazarlo con pegarle o golpearlo con la intención de causarle dolor intenso).	□ Si □ No Si su respuesta es **SÍ,** ¿con qué frecuencia? □ Solamente una vez □ Mas de una vez pero no frecuencia □ Con frecuencia □ Con mucha frecuencia

6) ¿Alguna vez alguien lo lastimó físicamente antes de los 16 años de edad? (Es decir, pegarle realmente en forma física con la intención de causarle dolor intenso).	□ Si □ No Si su respuesta es **SÍ,** ¿con qué frecuencia? □ Solamente una vez □ Mas de una vez pero no frecuencia □ Con frecuencia □ Con mucha frecuencia
7) ¿Alguna vez alguien lo lastimó verbalmente antes de los 16 años de edad? (Es decir, que le haya dicho o que dijera cosas hirientes sobre usted con la intención de causarle daño emocional).	□ Si □ No Si su respuesta es **SÍ,** ¿con qué frecuencia? □ Solamente una vez □ Mas de una vez pero no frecuencia □ Con frecuencia □ Con mucha frecuencia

Appendix E

Perceived Control Over Sex Drive Subscale in English and Spanish

PCOSD

Below is a list of statements about which you may agree or disagree. Please respond to each item as honestly as you can by rating them on a five-point scale from strongly agree (1) to strongly disagree (5). Circle your answer. It's important that you respond according to what you actually believe and not according to what you think you should believe or what you think we want you to believe.

My sex drive controls my life.	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
I've tried to cut down on casual sex, but I just can't do it.	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
Once I get sex on my mind, I can't stop or relax until I've scored.	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
Sex is important to me, but it doesn't rule my life	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree

PCOSD

Abajo hay una lista de declaraciones las cuales usted podrá estar en acuerdo o desacuerdo. Por favor responda a cada declaración lo más honesto que pueda evaluándolos con una escala de 5 puntos de completamente en acuerdo (1) a completamente en desacuerdo (5). Circule su respuesta. Es importante que nos responda de acuerdo a lo que usted cree realmente y no de acuerdo a lo que cree usted que debería creer o lo que cree que nosotros queremos que crea.

Mi impulso sexual controla mi vida.	1 Completamente de acuerdo	2 De acuerdo	3 Ni de acuerdo ni en desacuerdo	4 En desacuerdo	5 Completamente en desacuerdo
He tratado de reducir en el sexo casual, pero nomas no puedo.	1 Completamente de acuerdo	2 De acuerdo	3 Ni de acuerdo ni en desacuerdo	4 En desacuerdo	5 Completamente en desacuerdo
Una vez que pienso en sexo, no puedo parar o relajarme hasta haberlo conseguido.	1 Completamente de acuerdo	2 De acuerdo	3 Ni de acuerdo ni en desacuerdo	4 En desacuerdo	5 Completamente en desacuerdo
El sexo es importante para mí, pero no controla mi vida.	1 Completamente de acuerdo	2 De acuerdo	3 Ni de acuerdo ni en desacuerdo	4 En desacuerdo	5 Completamente en desacuerdo

Appendix F

Multi-Dimensional Fatalism (3-factor) Scale in English and Spanish

Factor 1: Ineluctable Destiny (items= 1,4,7,10,13,16)
Factor 2: Helplessness (items= 2,5,8,11,14,17)
Factor 3: Externality (Internality reverse coded; items= 2,5,8,11,14,17)

MFS*

Instructions: Please answer the following questions based on what you think. Indicate how much you agree or disagree with each statement. Be sure to answer each question. Remember that there is no right or wrong answer. <u>Please circle the number that best corresponds.</u>

I have learned that what is going to happen will happen.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
I feel that nothing I can do will change things.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
I feel that when good things happen, they happen as a result of my own efforts.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
If something bad is going to happen to me, it will happen no matter what I do.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
Sometimes I feel there is nothing to look forward to in the future.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
What happens to me in the future mostly depends on me.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree

If bad things happen, it is because they were meant to happen.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
I feel that I do not have any control over the things that happen to me.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
My life is determined by my own actions.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
There is no sense in planning a lot; if something good is going to happen, it will.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
No matter how hard I try, I still cannot succeed in life.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
What people get out of life is always due to the amount of effort they put into it.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
Life is very unpredictable, and there is nothing one can do to change the future.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
I often feel overwhelmed with problems, since I do not have any control over solving these problems.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree

What happens to me is a consequence of what I do.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
People die when it is their time to die and there is not much that can be done about it.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
There's nothing I can do to succeed in life, since one's level of success is determined when one is born.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree
I can do almost anything if I really want to do it.	0 Strongly Disagree	1 Disagree	2 Neutral	3 Agree	4 Strongly Agree

MFS*

Direcciones: Por favor conteste las siguientes preguntas basándose en lo que usted piensa. Indique que tanto está de acuerdo o en desacuerdo con cada enunciación. Asegúrese de contestar cada pregunta. Acuérdese que no hay ninguna respuesta correcta ni incorrecta. Marque con un círculo el número con la respuesta que sea más adecuada para usted.

He aprendido que lo que tiene que pasar, pasará.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Siento que nada de lo que yo pueda hacer cambiará las cosas.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Siento que cuando pasan cosas buenas, suceden como resultado de mis propios esfuerzos.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Si algo malo me va a pasar, pasará sin importar lo que haga.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
A veces siento que no hay nada que esperar del futuro.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Lo que me pase a mí en el futuro depende mayormente de mi.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo

Si pasan cosas malas, es porque así tenían que pasar.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Yo siento que no tengo ningún control sobre las cosas que me pasan.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Mi vida está determinada por mis propias acciones.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
No tiene sentido hacer muchos planes; si algo bueno va a pasar, pasará.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
No importa que tanto me esfuerce, todavía no puedo triunfar en la vida.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Lo que la gente obtiene de la vida es siempre debido a la cantidad de esfuerzo que le dedican.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
La vida es muy imprevisible, y no hay nada que uno pueda hacer para cambiar el futuro.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo

Con frecuencia me siento abrumado con problemas, ya que no tengo ningún control sobre la resolución de estos problemas.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Lo que me pasa a mi es consecuencia de lo que yo haga.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
La gente se muere cuando es su tiempo de morir y no hay mucho que se puede hacer al respecto.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
No hay nada que yo pueda hacer para tener éxito en la vida, pues el nivel de éxito está determinado cuando uno nace.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo
Puedo hacer casi cualquier cosa si realmente quiero hacerlo.	0 Completamente en desacuerdo	1 En desacuerdo	2 Ni de acuerdo ni en desacuerdo	3 De acuerdo	4 Completamente de acuerdo

Appendix G

Simoni Sexual Behavior Questions in English and Spanish

SSBQ*

The next questions are about your sexual behavior. By sex we mean vaginal (penis in vagina) or anal (penis in butt) sex, but NOT oral sex. When we talk about condoms, we mean male or female condoms.

Please check one response.

1. In your life have you had sex with:
   - ☐ Only men
   - ☐ Mostly men
   - ☐ Men and women equally
   - ☐ Mostly women
   - ☐ Only women
   - ☐ No one

2. In the past 6 months:
   - With how many men have you had sex? _____
   - With how many women have you had sex? _____

3. Do you have a partner who you consider your main, steady, or primary partner?
   - ☐ Yes
   - ☐ No

If **yes** ,

3a. What is your main, steady, or primary partner's HIV status?
   - ☐ HIV-Positive
   - ☐ HIV-Negative
   - ☐ I don't know

3b. How many times in the past six months have you had sex with your main partner:
   - with condoms? _____
   - without condoms? _____

4. During the last six months with how many casual partners (men or women who you do not consider your main, steady, or primary partner) have you had sex? _____ (**If answer is zero, continue to next measure**)

4a. How many of your casual partners were HIV-Positive? _____

Among these HIV-Positive casual partners:
4ai. How many times in the past six months did you have anal/vaginal sexual intercourse:

with condoms? _____
without condoms? _____

4b. Over the past six months, how many of your casual partners were HIV-Negative? _____

Among these HIV-Negative casual partners:
4bi. How many times in the past six months did you have anal/vaginal sexual intercourse:

with condoms? _____
without condoms? _____

4c. Still thinking about the last six months, how many casual partners have you had whose HIV status you did not know?

Among these HIV-Unknown casual partners:
4ci. How many times in the past six months did you have anal or vaginal sexual intercourse:

with condoms? _____
without condoms? _____

SSBQ*

Las siguientes preguntas son sobre su comportamiento sexual. Por la palabra "sexo" nos referimos a sexo vaginal (pene en la vagina) o anal (pene en el trasero) pero NO al sexo oral. Cuando hablamos sobre condones, nos referimos a los condones tanto del hombre como de la mujer.

Por favor marque una respuesta.

1. Durante su vida, usted ha tenido sexo con:
   - ☐ Hombres únicamente
   - ☐ Hombres en su mayoría
   - ☐ Hombres y mujeres por igual
   - ☐ Mujeres en su mayoría
   - ☐ Solo mujeres
   - ☐ Nadie

2. En los últimos seis meses:
   - ¿Con cuántos hombres ha tenido relaciones sexuales? _____
   - ¿Con cuántas mujeres ha tenido relaciones sexuales? _____

3. Tiene una pareja a quien usted considera su pareja principal, regular o primaria?
   - ☐ Si
   - ☐ No

Si contestó **si**:

3a. ¿Cuál es el estatus de VIH de su pareja principal, regular o primaria?
   - ☐ VIH-Positivo
   - ☐ VIH-Negativo
   - ☐ Estatus desconocido

3b. ¿Cuántas veces en los últimos seis meses ha tenido relaciones sexuales con su pareja principal:
   - ¿Con condones? _____
   - ¿Sin condones? _____

4. Durante los últimos seis meses, ¿con cuántas parejas casuales (hombres o mujeres que no considera como principal, regular o primaria) ha tenido sexo? _____ (Si la respuesta es 0, continúe con el próximo cuestionario)

4a. ¿Cuántas parejas casuales eran VIH-Positivo? _____

Entre estas parejas casuales VIH-Positivo:
4ai. ¿Cuántas veces en los últimos seis meses ha tenido sexo anal/vaginal:
¿Con condones? _____
¿Sin condones? _____

4b. ¿En los últimos seis meses cuántas parejas casuales eran VIH-Negativo? _____

Entre estas parejas casuales VIH-Negativo:
4bi. ¿Cuántas veces en los últimos seis meses ha tenido sexo anal/vaginal:

¿Con condones? _____
¿Sin condones? _____

4c. ¿Todavía pensando en los últimos seis meses, con cuántas parejas casuales has tenido sexo con cual su estatus de VIH usted desconocía?_____

Entre estas parejas casuales VIH-desconocido:
4ci. ¿Cuántas veces en los últimos seis meses, usted ha tenido sexo anal/vaginal:

¿Con condones? _____
¿Sin condones? _____

Appendix H

Centro de Salud Familiar La Fe- Medical Staff Assessment

Centro de Salud Familiar La Fe, Inc. - La Fe CARE Center
Regular Patient Visit Form (Page 1 of 2)

DOB **MR#** **Date**

ASSESSMENTS: Sex: Active? Y / N: last time ___ # partners past month: ☐ Men ☐ Women ☐ Both, Aware HIV+? Y /N
Current % condom use: Oral Anal _____ Vaginal_____ LMP: Contraception
Substance Use: ☐ Tobacco Icohol ☐ IVDU ☐ MJ_____ ☐ Cocaine_____ ☐ Crystal_____
ARV Tx: # Missed doses: ___in last 3 days, _____in last month Reason for misses: ☐ Not ARV Tx
ER / Hospital visit since last appt (reason, date, location):
Mental Health: Depressed____, Anxious____, Tired____, Irritable___, Insomnia___, Low interest___, Low self-esteem____
Pain Scale: None / Mild (1,2,3) / Moderate (4,5,6,7) / Severe (8,9,10) Location:
Onset: Frequency: Duration:
Treatments Tried: What makes it better? Worse?
Vital Signs: T_____ **P**_____ **R**_____ **Wt**_____ **Ht**_____ **B/P** **BMI**
Reason for Visit: **AHP:**

ROS

Y/N Anorexia	Y/N Weight Loss	Y/N Abdom. Pain	Y/N Nausea/Vomiting	Y/N Diarrhea	Y/N Constipation
Y/N Fever/Sweats	Y/N Cough/SOB	Y/N Headaches	Y/N Rash	Other:	

PHYSICAL EXAM

NL	ABN	ND	
o	o	o	General
o	o	o	Skin
o	o	o	HEENT
o	o	o	Neck / Nodes
o	o	o	Lungs
o	o	o	CV
o	o	o	Abd
o	o	o	GU
o	o	o	Ext
o	o	o	Neuro

Labs: Date CD4+ Date VL
T.Chol TG ____
HDL LDL

A & P) oHIV+(V08)_____
oAIDS(042)_____
oVacc / CA Screen _____
oNutrional:_____

o
o

Vita

Carolina Lara was born on August 16, 1992 in El Paso, Texas. In 2008, Carolina graduated from Austin High School at the age of 15 and decided to strive for a higher education. In 2010 Carolina earned her Bachelor's degree in psychology from the University of Texas at El Paso (UTEP). While pursuing this degree, she obtained a research position working for the Hispanic Health Disparities Research Center (HHDRC). She then entered the Clinical Psychology Master's Program at UTEP in 2011, completing the Master's degree in 2013 at the age of 20. While pursuing her Master's degree in clinical psychology, Carolina was able to present her research at several conferences, such as the Society of Behavioral Medicine (SBM) and the International Association of Providers of AIDS Care (IAPAC). Carolina also co-authored a book chapter, "Assessing Mood Disorders and Suicidality in Hispanics," and worked as the project coordinator for the research study entitled "Substance Use and Sexual Risk among HIV+ Hispanic MSM, a subproject of UTEP DIDARP: Vulnerability Issues in Drug Abuse (VIDA)." Carolina will enter a Ph.D. program in clinical psychology in August 2013 at the University of Arizona (U of A), being awarded a full tuition/registration waiver, health insurance coverage, TA (Teaching Assistant) position, and a Graduate Access Fellowship.

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This thesis was typed by Carolina Lara.