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## Child Sexual Abuse and Adult Mental Health, Sexual Risk Behaviors, and Drinking Patterns Among Latino Men Who Have Sex With Men

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### Abstract

One in five Latino men who have sex with men has experienced child sexual abuse. Although concerning in itself, child sexual abuse may increase an individuals' likelihood of depression and risk-taking in adult life, including engagement in HIV risk behaviors and alcohol and substance use. It is therefore urgent that researchers and practitioners better understand the long-term effects of child sexual abuse. We utilized logistic and linear regression to assess associations between child sexual abuse (operationalized as forced or coerced sexual activity before age 17) and

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#### Disclosure of interest

The authors have no conflicts of interest to report.

#### Ethical standards and informed consent

The study was approved by the New York State Psychiatric Institute Institutional Review Board. We further obtained a National Institutes of Health Certificate of Confidentiality in accordance with the Public Health Service Act 42 U.S.C. 241(d) to ensure privacy. All participants provided oral informed consent; we were granted a waiver of written consent due to the minimal risk of harm to participants. Although we did not provide financial incentives, we collaborated with participants to identify unmet health needs and provide appropriate resources and referrals as part of the screening process. All participants were provided with a list of comprehensive services, including HIV and STI testing venues and mental health resources.

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depression, sexual behaviors, and drinking patterns in a sample of 176 adult Latino men who have sex with men from New York City. Over one-fifth (22%) of participants reported child sexual abuse. In multivariable models, participants with histories of child sexual abuse were significantly more likely than participants without such histories to screen for clinically significant depressive symptoms and heavy drinking and reported more anal sex acts, male sexual partners, and incidents of condomless anal intercourse in the previous three months. These findings confirm a high prevalence of child sexual abuse among Latino men who have sex with men and associations between child sexual abuse and adulthood depressive symptoms, high-risk alcohol consumption, and sexual risk behaviors. We recommend that providers who serve Latino men who have sex with men incorporate child sexual abuse screenings into mental health, HIV prevention, and substance use treatment programs, utilizing approaches that are inclusive of resilience.

## Keywords

Abuse; alcohol; depression; HIV; Latinos

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Child sexual abuse (CSA) constitutes an ongoing public health concern among Latino men who have sex with men (MSM). Whereas approximately 16% of adult males and 20% of non-Latino MSM report CSA between ages 0 and 17, 29% of Latino MSM report CSA during these years (Arreola et al., 2005; Dube et al., 2005). Moreover, approximately three-quarters of Latino MSM who have experienced CSA report at least one incident of sexual abuse before their 13th birthday (Arreola et al., 2005). Even these rates may be somewhat conservative; detection and reporting, always challenging for CSA, may be further complicated by language barriers and noncitizen status in this population. However, relative to adult women survivors, adult MSM and other men remain underserved by researchers and providers; this is particularly true for Latino MSM (Easton, 2013; Yeager & Fogel, 2006).

Researchers, providers, and activists have worked for many years to raise awareness of CSA among MSM, Latino and otherwise. However, empirical investigations and the broader scientific literature have lagged somewhat. We set out to address this by assessing the prevalence and long-term outcomes of CSA in a sample of adult Latino MSM from New York City. It is particularly important to explore the long-term impact of CSA among Latino MSM, given potential connections to HIV risk. A recent U.S. Centers for Disease Control and Prevention Study (CDC, 2016) noted that, if present infection and transmission rates continue, 1 in 4 Latino MSM in the United States will be diagnosed with HIV during their lifetime. Associations between CSA and HIV risk factors warrant targeted research efforts and, if indicated by those efforts, targeted programmatic interventions. Through expanding on available scientific knowledge, we hope to address gaps in the current literature on CSA and provide evidence-based recommendations for providers who serve CSA survivors and/or Latino MSM.

Relationships between CSA and mental health outcomes in childhood have been well documented over the past several decades. Children who experience sexual abuse face an elevated risk of clinical depression, anxiety, dissociative symptoms, and other psychiatric disorders (Chaffin, Silovsky, & Vaughn, 2005; Feiring, Cleland, & Simon, 2009; Maniglio,

2010; Olafson, 2011). In addition, youth may avoid memories of prior abuse as a means of coping with ongoing depressive symptoms (Johnson, Greenhoot, Glisky, & McCloskey, 2005); in other words, depression may both result from CSA and inhibit disclosure and treatment. Boys are particularly likely to internalize their experiences and any resulting feelings of shame or self-blame (Lewis, McElroy, Harlaar, & Runyan, 2016). These effects may persist into adulthood (Easton, 2012; Maniglio, 2010; O'Leary, 2009; O'Leary, Coohy, & Easton, 2010). Concerns about stigma, including fears of homophobic reactions, may lead men of all sexualities to continue internalizing their experiences and delay disclosure to providers and loved ones; this exacerbates the already considerable challenges of detecting and treating experiences of CSA (Gagnier & Collin-Vézina, 2016; O'Leary, 2009). Research with MSM survivors of CSA confirms an elevated risk of depression and other mental health outcomes (Mimiaga et al., 2009, 2015; Phillips et al., 2014; Schafer, Gupta, & Dillingham, 2013), including research specific to Latinos (Arreola, Neilands, & Diaz, 2009; Saucedo, Wiebe, & Simoni, 2014).

Research with adult survivors has further demonstrated relationships between CSA and adult drinking patterns. In a study with adult heterosexual men, Schraufnagel and colleagues (2010) found that CSA predicted an earlier onset of regular alcohol use as well as heavier drinking in adulthood. There have been some investigations of alcohol use among MSM with histories of CSA, many of which approach alcohol use as a mediator of the relationship between CSA and sexual risk behaviors. Findings, however, have been inconsistent. In an investigation of CSA and HIV-related risks in a racially diverse sample of urban MSM, Phillips and colleagues (2014) found no association between history of CSA and binge drinking. In a four-year study of HIV risk among MSM in six U.S. cities, Mimiaga and colleagues (2009) documented a significant relationship between CSA and alcohol use and found that alcohol use was further correlated with sexual risk taking.

Finally, CSA may have long-term effects on sexual behaviors (Jones et al., 2010). Perhaps driven by concerns about HIV/STIs, literature on sexual outcomes among MSM survivors of CSA is considerably more developed than literature on mental health and substance use outcomes. Indeed, scholars and advocates have argued for greater attention toward associations between CSA and HIV sexual risk behaviors among MSM since the 1990s; such associations have since been supported through empirical investigations. Numerous studies have documented an elevated HIV risk in this population due to increased odds of sexual risk taking, operationalized through such diverse measures as participation in unprotected sex acts, engagement with multiple partners, exchanging sex for money or drugs, and using alcohol and other substances prior to sexual encounters (Arreola et al., 2009; Gore-Felton et al., 2006; Lloyd & Operario, 2012; Paul, Catania, Pollack, & Stall, 2001; Welles et al., 2009). Available data specific to Latino MSM indicate that those with histories of CSA are more likely to engage in sexual risk behaviors and thus face a greater risk of HIV and STIs than those without such histories (Arreola et al., 2009; Carballo-Diéguez & Dolezal, 1995). However, such studies have typically been conducted with acculturated Latinos, particularly those who speak only or predominantly English. Consequently, the impact of CSA on adult health outcomes for Latino MSM who also face language barriers and other challenges associated with acculturation remains understudied.

The present study contributes to prior research on CSA through its emphasis on Latino MSM, including but not limited to those who are predominantly Spanish speaking and/or recent arrivals to the United States. Given the high rates of CSA in this population, the paucity of community-specific research is concerning. It must not be assumed that the long-term impacts of CSA for Latino MSM are necessarily identical to those for heterosexual Latinos, non-Latino MSM, and/or women of all races/ethnicities and sexualities. Similarly, the experiences of acculturated, English-speaking Latino MSM may differ from those of less acculturated, monolingual Spanish-speaking Latino MSM. The aggravating or mitigating effects of other factors, such as education, may also vary across populations. It is thus essential to empirically examine the scope and long-term effects of CSA within specific at-risk populations. To that end, this study provides exploratory data regarding the correlates and long-term outcomes of CSA in a sample of Latino MSM. In addition, whereas most relevant studies have focused on a single type of outcome (e.g., sexual risk), we assess outcomes regarding depression, drinking patterns, and sexual behavior to maximize our contribution to the literature.

We predicted that CSA would be associated with an increased risk of clinically significant depressive symptoms and high-risk drinking as well as more anal sex acts, male sexual partners, and incidents of condomless anal sex acts. These predictions were informed by literature linking CSA to numerous health and behavioral risks that may continue into adulthood and the need to explore these associations specifically among Latino MSM. However, we recognize that differences need not necessarily constitute detriments; in other words, all features that distinguish MSM with histories of CSA need not be presumed disadvantageous or problematic. We further note that CSA may contribute to negative outcomes such as depression and sexual risk taking while also acknowledging the potential for CSA survivors to undergo posttraumatic growth (Hartley, Johnco, Hofmeyr, & Berry, 2016; O'Leary, 2009) as they process and recover from violent experiences.

## Methods

### Participants

As part of a broader study on the experiences and needs of Latino MSM in New York City, we recruited a community sample of 176 adult Latino MSM. Enrollment began in January 2014 and ended in March 2014. Recruitment venues included social media (e.g., Facebook and Grindr), community-based organizations that serve Latino MSM, and word-of-mouth referrals. We employed purposive, stratified sampling to diversify the sample in regard to national origin, HIV status and testing history, behavioral risk factors, and prior involvement in HIV-related research. Although recruitment materials advertised this as a study with Latino MSM, four Latina transgender or transsexual women expressed interest in participating. Rather than exclude them, we accepted their self-assessment as members of this community (see Valentine, 2007). There may also have been transgender or transsexual men in our sample; however, no participants disclosed such identities.

## Measures

Participants completed a questionnaire that addressed a range of issues, such as alcohol use, sexual behaviors, and demographic characteristics. Questionnaires were administered in-person or over the phone, and in English or Spanish, based on participants' needs and preferences.

**Demographic characteristics**—We included the following demographic control variables: age (years), primary language (predominantly Spanish, Spanish and English equally, predominantly English), education (less than high school, high school or GED, some college, associate's degree or higher), nation of origin (born in the United States or born outside of the United States), and relationship status (in a same-sex relationship or not in a same-sex relationship). Participants were also asked to report their Latino ethnicity; due to sample size concerns, we did not incorporate these data into multivariable models.

**Child sexual abuse**—Participants were asked whether they had experienced any sexual activity before the age of 17. Those who answered “yes” were then asked whether any such activity was “forced” or “coerced.” All participants who answered “yes” to this follow-up question were classified as having experienced CSA.

**Drinking patterns**—Participants were asked whether they had ever consumed 5 or more alcoholic beverages on a single occasion. Those who answered “yes” were then asked how many times they had done so in the previous 30 days. Based on recommendations from the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015), we then classified participants as having engaged in “binge drinking” (5 or more alcoholic drinks on the same occasion, between 1 and 4 times during the previous 30 days), “heavy drinking” (5 or more alcoholic drinks on the same occasion, 5 or more times during the previous 30 days), or “no high-risk consumption” (no occasions in which participants consumed 5 or more drinks in the past 30 days).

**Clinically significant depressive symptoms**—We assessed depressive symptoms via the 10-item Center for Epidemiological Studies Depression scale (CES-D 10; Chronbach's  $\alpha = 0.86$  in our sample of Latino MSM). This scale has been found valid and reliable for screening depressive symptoms in numerous populations, including Latinos (Cheng & Chan, 2008; Rhodes et al., 2010; Robison, Gruman, Gaztambide, & Blank, 2002; Wendy et al., 2012). Sample items included “I was bothered by things that don't usually bother me” and “I felt depressed.” Participants described the frequency with which they had recently experienced 10 different thoughts or feelings indicative of depressive symptoms during the previous week on a scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time), so that their CES-D scores ranged from 0 (no symptoms in the previous week) to 30 (all 10 symptoms, most or all of the time, in the previous week). Cutoff points of 8 and 10 have been used with the CES-D 10 to classify subjects with clinically significant depression (Darnall et al., 2005). We used the more conservative cutoff point of 10.

**Sexual behaviors**—These measures were based on survey guidelines from the National Survey of Sexual Health and Behavior (Reece et al., 2010). We asked participants to report

the number of male sexual partners they had had in the past three months. Those who reported at least one partner were then asked a series of follow-up questions prompting them to indicate the number of anal intercourse episodes in the past three months as well as the number of times that condoms were used from start to finish. We calculated the number of incidents of condomless anal intercourse (CAI) by subtracting the reported incidents with condom use from the total number of anal sex acts.

### Data analysis

*T* tests (for continuous measures) and  $\chi^2$  tests (for categorical measures) were performed to explore demographic differences between participants who did and did not report CSA. We then explored associations between CSA and all outcome variables using binomial logistic regression for clinically significant depression, multinomial logistic regression for high-risk alcohol consumption, and Poisson regression for anal sex acts, male sexual partners, and incidents of CAI. Finally, we constructed multivariable models adjusting for age, primary language, education, nation of origin, and relationship status. A total of 174 participants provided data for CSA, demographic, drinking patterns, and sexual behavior measures (99% of the original sample); 172 provided data for CSA, demographic, and depression measures (98%). Rather than impute missing values to accommodate such minor loss, we retained only participants with complete data for multivariable analyses.

### Results

Sample characteristics, including differences by reports of CSA, appear in Table 1. Bivariate associations between CSA and clinically significant depression, number of anal sex acts, number of male sexual partners, and incidents of condomless anal intercourse were all significant ( $p < .05$ ). CSA was not significantly associated with drinking patterns ( $p < .10$ ; see Table 1); however, we retained this as an outcome variable due to patterns documented in previous literature. Participants who reported CSA did not differ demographically from those who did not. However, we retained all control variables for multivariable models in order to calculate the impact of CSA adjusted for demographic differences. Multivariable analyses for depressive symptoms, drinking patterns, and sexual behaviors appear in Tables 2, 3, and 4 respectively. Data for all independent and control variables are included.

### Sample characteristics

The mean age of our sample was 33 years. Over half of the participants identified Spanish as their primary language ( $n = 99$ , 56%); the rest spoke, wrote, and read predominantly in English or in English and Spanish equally. Fourteen percent of participants had not completed high school ( $n = 24$ ), and 30% had earned only a high school diploma or GED. Approximately one-third of participants were born in the United States ( $n = 50$ , 29%). Two-thirds were in same-sex relationships at the time of the study ( $n = 118$ , 67%).

One-fifth of participants reported CSA ( $n = 39$ , 22%). A majority exhibited clinically significant depressive symptoms ( $n = 120$ , 69%). Nearly half reported either binge ( $n = 36$ , 21%) or heavy drinking ( $n = 47$ , 27%). Participants reported a mean of 27 anal sex acts (SD



= 34.39), 8 sexual partners (SD = 19.11), and 12 incidents of CAI (SD = 29.25) in the previous three months.

### Multivariable models

**Depression**—Participants who reported CSA were more likely to be clinically depressed (OR = 3.46,  $p < .05$ , 95% CI [1.28, 9.41]). Participants who spoke Spanish and English equally, or who spoke predominantly English, were less likely to be clinically depressed than those who spoke predominantly Spanish (OR = 0.39,  $p < .05$ , 95% CI [0.17, 0.89]; OR = 0.26,  $p < .05$ , 95% CI [0.07, 0.92], respectively). Those who were born in the United States were more likely to exhibit depressive symptoms (OR = 4.51,  $p < .01$ , 95% CI [1.66–12.30]).

**Drinking patterns**—In multinomial logistic regression, CSA was associated with increased odds of heavy drinking (OR = 2.75,  $p < .05$ , 95% CI [1.16, 6.50]) but not binge drinking. Participants in same-sex relationships were more likely to report binge and heavy drinking (OR = 4.11,  $p < .01$ , 95% CI [1.48–11.45]; OR = 2.39,  $p < .05$ , 95% CI [1.00, 5.67], respectively).

**Sexual behaviors**—In Poisson regression, CSA was positively associated with number of anal sex acts, number of male sexual partners, and incidents of CAI (incidence rate ratio [IRR] = 1.64,  $p < .01$ , 95% CI [1.54–1.75]; IRR = 2.27,  $p < .01$ , 95% CI [2.02–2.52]; IRR = 2.06,  $p < .01$ , 95% CI [1.89–2.26]). A one-year increase in age was associated with a 1% increase in anal sex acts (IRR = 1.01,  $p < .01$ , 95% CI [1.00–1.01]), a 2% increase in male sexual partners (IRR = 1.02,  $p < .01$ , 95% CI [1.02–1.03]), and a 1% decrease in CAI incidents (IRR = 0.99,  $p < .01$ , 95% CI [0.99–1.00]). Relative to participants who spoke predominantly Spanish, those who spoke Spanish and English equally reported more partners and fewer incidents of CAI (IRR = 1.30,  $p < .01$ , 95% CI [1.14–1.48]; IRR = 0.73,  $p < .01$ , 95% CI [0.66–0.82]; respectively). Those who spoke predominantly English reported fewer anal sex acts and fewer CAI incidents (IRR = 0.82,  $p < .01$ , 95% CI [0.74–0.90]; IRR = 0.76,  $p < .01$ , 95% CI = 0.66–0.86; respectively). Being born in the United States was positively associated with all three outcomes (IRR = 1.15,  $p < .01$ , 95% CI [1.06–1.23] for anal sex acts; IRR = 1.86,  $p < .01$ , 95% CI [1.63–2.12] for male sexual partners; IRR = 1.51,  $p < .01$ , 95% CI [1.36–1.68] for CAI). Participants with high school diplomas or GEDs, some college, or two-year degrees or higher reported more anal sex acts (IRRs ranged from 1.25–1.63,  $p < .01$ ) and more male sexual partners (IRRs ranged from 3.20–4.24,  $p < .01$ ) than participants with less than a high school education. Education was not associated with CAI.

### Discussion

The findings from this study contribute to the literature on the impact of CSA on clinically significant depression, high-risk alcohol consumption, and sexual risk behaviors among adult men who have sex with men and further expand this literature through addressing the needs and experiences of predominantly Spanish-speaking Latino MSM. CSA was significantly and positively associated with all outcome measures. For example, Latino

MSM who reported CSA were 3.5 times as likely as their peers to be clinically depressed and 2.8 as likely to report heavy drinking. Furthermore, those who reported CSA engaged in approximately twice as much condomless anal intercourse over the previous three months than those without such histories. Overall, these findings complement those of Arreola and colleagues (2009), Dube and colleagues (2005), and others in suggesting that CSA is related to adult mental health, high-risk alcohol consumption, and sexual risk behaviors.

Findings regarding CSA and drinking patterns warrant further investigation. Latino MSM with histories of CSA were more likely to report heavy drinking than those without such histories, but there was no relationship between CSA and binge drinking. This finding may relate to some of the difficulties in operationalizing “risky” or “problem” consumption. While both binge and heavy drinking are designated as risky by the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015), they might be conceived as quite different behaviors. Binge drinkers might engage in occasional nights of heavy consumption. To qualify as heavy drinkers, individuals must engage in at least five sessions of binge drinking over a 30-day period—at least 1–2 times per week, on average. This would be more consistent with alcohol dependency, or the use of alcohol as a coping mechanism (see Martinez et al., 2016). This distinction may also serve to account for some inconsistency in prior research regarding associations, or lack thereof, between CSA and adult drinking patterns among MSM (Mimiaga et al., 2009; Phillips II et al., 2014).

While this investigation focused primarily on associations between CSA and adult health outcomes, findings regarding language preference and nation of origin also warrant further investigation. Participants who were born in the United States were substantially more likely to be clinically depressed and were likely to report more anal sex acts, male partners, and incidents of condomless anal intercourse than those who were born elsewhere. However, participants who spoke Spanish and English equally, or who spoke predominantly English, were less likely to be depressed and were likely to report fewer incidents of CAI than those who spoke predominantly Spanish. These findings may speak to the complexities of acculturation and developing (or not) a sense of belonging within mainstream U.S. society (Lee, Almeida, Colby, Tavares, & Rohsenow, 2016; Lewis, 2016). For example, it may be that foreign-born participants benefit from rich transnational ties but that ongoing language barriers (faced by Spanish-only speakers but not necessarily by those who speak Spanish and English equally) contribute to depression and risk-taking behaviors. Subsequent studies should explore these associations in greater depth. More specifically, researchers might incorporate measures for specific nation of origin and recruit sufficiently large samples to explore variation in the prevalence and correlates of CSA across nations of origin and Latino ethnicities.

Whereas this study is among the few to explore the impact of CSA on adult depression, alcohol abuse, and sexual risk behaviors among Latino MSM, its limitations must be kept in mind. We had a modest sample size and employed a cross-sectional survey. Subsequent studies should adopt longitudinal approaches to assess variability in substance use and sexual behaviors over time. Generalizability is limited by the use of a sample of Latino MSM in New York City, with a substantial number of predominantly Spanish-speaking participants and limited information regarding nation of origin. In addition, sexual behavior



measures were restricted to number of sexual acts, male partners, and incidents of CAI; further research should address these behaviors in more detail (e.g., considering CAI within and outside of primary sexual relationships, addressing insertive and receptive acts of anal intercourse and incorporating the use or lack of use of other forms of protection such as PrEP) and incorporate additional measures such as sexual compulsivity.

Our CSA measure was limited to a single question about forced or coerced sexual experiences before the age of 17. While it is a strength of this measure that we permitted participants to self-assess, to determine for themselves whether they had experienced forced or coerced sexual activity in childhood, this measure provided no further information regarding participants' specific experiences of CSA. More detailed measures would permit a more comprehensive assessment of sexual abuse experiences across childhood, incorporating such details as perpetrator-offender relationship(s), duration of any ongoing abusive relationships, and age of first victimization. In addition, our CSA measure was somewhat conservative. Some participants who experienced exclusively nonconsensual sexual contact in childhood might have answered "no" to our initial question, in which case they would not have been asked about CSA. This measure was further vulnerable to underreporting, as some participants who have experienced CSA may have been reluctant to disclose their experiences and/or may not have personally labeled them as forced or coerced. It is not unusual for survivors of CSA, particular men (Latino and otherwise), to describe abusive experiences as consensual when asked directly; these individuals would not have been classified as CSA survivors in this study. It is further important to note that we provided a retrospective analysis through asking participants to report on prior experiences of abuse and that data may have suffered from recall bias.

Despite their limitations, these analyses provide an opportunity to enrich the available literature on the long-term effects of CSA on multiple dimensions of adult health and behavior—depression, high-risk alcohol consumption, and sexual risk behaviors—among Latino MSM. Our sample included a substantial proportion of Spanish-speaking and foreign-born Latino MSM, a vulnerable group that might be particularly unlikely to report or seek preventive and treatment services due to language barriers and documentation status. Our findings speak to the imperative need for preventive programs and policies targeting adults with CSA histories to address depression, substance use, and sexual risk behaviors in adulthood. Given the links established here between CSA and sexual risk behaviors and the elevated risk of HIV infection among Latino MSM (CDC, 2016), targeted and culturally appropriate interventions are all the more urgent.

Men who have experienced CSA may benefit from seeking social and instrumental support and from encouragement to reinterpret their experiences with violence such that they recognize a potential for growth and recovery (Hartley et al., 2016; O'Leary, 2009). Given the associations between CSA and various health outcomes among Latino MSM, including HIV risk behaviors, this population might benefit from comprehensive approaches to care. Many Latino MSM (including those with and without histories of CSA) lack access to medical and social services due a range of factors including cultural and language barriers, documentation status, and concerns about racial/ethnic and homophobic stigma. Programs that already serve Latino MSM for such matters as mental health, alcohol and other

substance use, medical care, legal support, and sexual health should incorporate screening for CSA into their intake processes and be prepared to provide or link individuals with appropriate care.

Such screening measures and treatment considerations for adult survivors of CSA should be accompanied by investment in selective primary prevention. Although supporting adult survivors CSA is important, it is also vital to improve support for youth who are currently experiencing abuse. Findings from this study reinforce the need to address CSA through comprehensive education and resource programs in primary and secondary schools. Schools with substantial Latino student populations, including youth who are predominantly Spanish speaking and/or from immigrant families, must ensure that CSA programming is inclusive of and responsive to the needs of these youth. Better access to supportive and affirming services in childhood might prevent or at least mitigate the long-term outcomes in drinking patterns, mental health, and sexual risk documented here among adult Latino MSM with histories of CSA.

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**Table 1**

Sample Characteristics by Reports of Child Sexual Abuse.

	<u>All Participants</u>	<u>CSA</u>	<u>No CSA</u>
	<u>M (SD) or n (%)</u>	<u>M (SD) or n (%)</u>	<u>M (SD) or n (%)</u>
Child Sexual Abuse	39 (22.16)		
Age (M)	33.37 (9.10)	35.38 (7.88)	32.80 (9.36)
Primary Language			
Predominantly or Exclusively Spanish	99 (56.25)	19 (48.72)	80 (58.39)
Spanish and English Equally	50 (28.41)	11 (28.21)	39 (28.47)
Predominantly or Exclusively English	27 (15.34)	9 (23.08)	18 (13.14)
Education (n = 175)			
Less Than High School	24 (13.71)	8 (20.51)	16 (11.76)
High School or GED	53 (30.29)	11 (28.21)	42 (30.88)
Some College	46 (26.29)	8 (20.51)	38 (27.94)
Associate's Degree or Higher	52 (29.71)	12 (30.77)	40 (29.41)
Born in the United States (n = 175)	50 (28.57)	12 (30.77)	38 (27.94)
Latino Ancestry (n = 163)			
Central American	40 (25.54)	10 (28.57)	30 (23.44)
Cuban	5 (3.07)	1 (2.86)	4 (3.13)
Puerto Rican	28 (17.18)	6 (17.14)	22 (17.19)
Dominican	29 (17.79)	4 (11.43)	25 (19.53)
South American	36 (22.09)	10 (28.57)	26 (20.31)
Other	25 (15.33)	4 (11.43)	21 (16.41)
In a Same-Sex Relationship (n = 175)	118 (67.43)	28 (71.79)	90 (66.18)
Alcohol Consumption in Past 30 Days			
Binge Drinking	36 (20.45)	7 (17.95)	29 (21.17)
Heavy Drinking	47 (26.70)	16 (41.03)	31 (22.63)
No High-Risk Drinking	93 (52.84)	16 (41.03)	77 (56.20)
Clinically Significant Depression* (N = 173)	120 (69.36)	33 (84.62)	87 (64.93)
Sexual Behaviors in Past 3 Months			
Number of Anal Sex Acts** (M)	26.50 (34.39)	37.92 (46.26)	23.25 (29.60)
Number of Male Sexual Partners** (M)	7.74 (19.11)	13.38 (26.45)	6.14 (16.20)
Incidents of Condomless Anal Intercourse** (M)	13.03 (29.25)	21.95 (40.65)	10.50 (24.69)
<i>N</i> (unless otherwise specified)	<i>176</i>	<i>39</i>	<i>137</i>

\* p &lt; .05,

\*\* p &lt; .01 for bivariate assessments of outcome measure by reports of CSA.

Clinically significant depression was assessed using a cutoff of 10 on the CES-D 10 scale.

Analyses included Poisson regression for sexual behavior measures, binomial logistic regression for clinically significant depression, multinomial logistic regression for alcohol consumption.

**Table 2**

Logistic Regression of Clinically Significant Depression by Reports of Child Sexual Abuse.

	<b>Clinically Significant Depression</b>	
	<b>OR</b>	<b>95% CI</b>
Child Sexual Abuse	3.46*	1.28–9.41
In Same-Sex Relationship	0.73	0.33–1.64
Age (per year)	0.99	0.95–1.03
Born in the United States	4.51**	1.66–12.30
Language (ref: predominantly Spanish)		
Spanish and English Equally	0.39*	0.17–0.89
Predominantly English	0.26*	0.07–0.92
Education (ref: less than high school)		
High School or GED	0.77	0.21–2.84
Some College	0.41	0.11–1.54
Two-Year Degree or Higher	0.38	0.10–1.37
<i>Log Likelihood</i>	–94.21	
<i>LR <math>\chi^2</math> (df)</i>	24.03 (9)	
<i>Pseudo R<sup>2</sup></i>	0.11	
<i>N</i>	172	

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

Clinically significant depression was assessed using a cutoff of 10 on the CES-D 10 scale.

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**Table 3**

Multinomial Logistic Regression of Drinking Patterns by Reports of Child Sexual Abuse.

	<u>Binge Drinking</u>		<u>Heavy Drinking</u>	
	<b>OR</b>	<b>95% CI</b>	<b>OR</b>	<b>95% CI</b>
Child Sexual Abuse	1.14	0.40–3.25	2.75*	1.16–6.50
In Same-Sex Relationship	4.11**	1.48–11.45	2.39*	1.00–5.67
Age (per year)	1.00	0.95–1.05	0.96	0.92–1.01
Born in the United States	1.34	0.49–3.66	1.15	0.43–3.05
Language (ref: predominantly Spanish)				
Spanish and English Equally	1.43	0.55–3.69	0.88	0.35–2.19
Predominantly English	0.38	0.08–1.78	1.08	0.33–3.55
Education (ref: less than high school)				
High School or GED	0.69	0.19–2.54	2.54	0.67–9.66
Some College	0.74	0.20–2.73	1.61	0.40–6.51
Two-Year Degree or Higher	0.68	0.19–2.46	2.23	0.58–8.61
<i>Log Likelihood</i>	–165.01			
<i>LR <math>\chi^2(df)</math></i>	24.43 (18)			
<i>Pseudo R<sup>2</sup></i>	0.07			
<i>N</i>	174			

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

Reference group for alcohol consumption is “no binge or heavy drinking.”

**Table 4** Poisson Regression of Anal Sex Acts, Male Sexual Partners, and Incidents of Condomless Anal Intercourse by Reports of Child Sexual Abuse.

	Anal Sex Acts		Male Sexual Partners		Condomless Anal Intercourse	
	IRR	95% CI	IRR	95% CI	IRR	95% CI
Child Sexual Abuse	1.64**	1.54–1.75	2.27**	2.03–2.52	2.06**	1.89–2.26
In Same-Sex Relationship	2.46**	2.27–2.67	0.78**	0.70–0.88	9.78**	7.98–11.97
Age	1.01**	1.00–1.01	1.02**	1.02–1.03	0.99**	0.99–1.00
Born in the United States	1.15**	1.06–1.23	1.86**	1.63–2.12	1.51**	1.36–1.68
Language (ref: predominantly Spanish)						
Spanish and English Equally	1.00	0.93–1.07	1.30**	1.14–1.48	0.73**	0.66–0.82
Predominantly English	0.82**	0.74–0.90	0.97	0.81–1.16	0.76**	0.66–0.86
Education (ref: less than high school)						
High School or GED	1.25**	1.12–1.40	4.02**	3.03–5.33	0.88	0.77–1.01
Some College	1.63**	1.47–1.82	4.24**	3.19–5.62	0.98	0.86–1.13
Two-Year Degree or Higher	1.45**	1.30–1.61	3.20**	2.40–4.25	1.11	0.97–1.27
<i>Log Likelihood</i>	-2688.59		-1683.4		-2647.28	
<i>Likelihood Ratio <math>\chi^2</math> (df)</i>	1052.77 (9)		620.51 (9)		1414.14 (9)	
<i>Pseudo R<sup>2</sup></i>	0.16		0.16		0.21	
<i>N</i>	174		174		174	

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