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Abuse, Mastery, and Health Among Lesbian, Bisexual, and Two-Spirit American Indian and Alaska Native Women

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Abstract

American Indian and Alaska Native (AIAN) women have endured a history of colonial oppression in the United States. Current manifestations of colonization include an epidemic of violence toward AIAN women, who often are sexually and physically abused from early on in life. Such violence may erode AIAN women's sense of agency or mastery and contribute to their poor physical and mental health outcomes. AIAN women who identify as lesbian, bisexual, or “two-spirit” appear to experience disproportionate levels of violence and may be particularly vulnerable to disparities in health outcomes. In this study, 152 sexual minority AIAN women were interviewed as part of an investigation addressing the health concerns of two-spirit persons. Participants reported disturbingly high prevalence of both sexual (85%) and physical (78%) assault, both of which were associated with worse overall mental and physical health. These relationships generally were mediated by a diminished sense of control or mastery. The need to indigenize the concept of mastery is discussed, as is the urgency of interventions to work toward decreasing levels of abuse and increasing mastery among sexual minority AIAN women.

Keywords

two-spirit; mastery; lesbian; American Indian

Colonizers have long tried to crush the spirit of the Indian peoples and blunt their will to resist colonization. One of the most devastating weapons of conquest has been sexual violence.

—Andy Smith (Incite!, 2001, p.1)

The legacy of colonial violence toward American Indians and Alaska Natives (AIANs or “Natives”) combined with contemporary human rights abuses in the United States has created a climate in which sexual violence toward AIAN women can flourish (Amnesty

International [AI], 2007). The violence has escalated under chronic underresourcing of law enforcement; discriminatory legal and health service provision; tribal, state, and federal jurisdictional disputes; and the steady erosion of tribal government authority over its own territories and policing functions (AI, 2007; Lobe, 2007). In addition, dehumanizing stereotypes of Native women integrated into legal systems have fueled colonial violence. For example, a federal appellate court ruling upheld a statute under which a Native man who committed rape would receive a lower penalty if the victim were a Native versus non-Native woman (Gray v. United States, 1968).

These systemic failings have contributed to indifference and resignation to colonial violence in the everyday lives of Native women. Their effect has been to steadily erode Native women's sense of agency in combating violence in their lives and seeking justice, with Native women often failing to report assaults because of the belief and experience that nothing would be done in response (AI, 2007).

This belief that justice will be denied is not unsubstantiated. AI, in a recent report (2007), concluded that AIAN victims of sexual violence find access to legal redress, adequate medical attention, and reparations difficult, if not impossible; impunity for perpetrators and indifference toward survivors contribute to a climate in which sexual violence is seen as normal and inescapable rather than criminal. Sexual violence against women, AI argued in the report, is not only a criminal or social issue but a violation of human rights. In this regard, the U.S. government was judged as failing in its obligations under international law to ensure these rights. Moreover, in this way the stripping of mastery or self-determination from Native people has been a deliberate and ongoing aspect of colonization.

Epidemiology of Violence

AIAN women experience higher rates of sexual and physical violence than women from any other ethnic or racial group in the United States (AI, 2007; Perry, 2004). Specifically, AIAN women over the age of 12 are 2.5 times more likely to be raped or sexually assaulted than all other women (5 vs. 2 per 1,000; Perry, 2004). In fact, 34% or more than one in three Native women will be raped during their lifetime, whereas for women as whole the risk is less than one in five (Tjaden & Thoennes, 2000). Not only do Native women experience higher levels of physical and sexual assault, they are more likely to experience physical brutality and sustain greater physical injury during rapes and sexual assaults than other U.S. women (50% vs. 30% all women; AI, 2007).

Recent empirical reports have substantiated the levels of abuse among community samples of AIAN women. Among a sample of 68 AIAN women recruited at a community event in the northeastern United States, 44% reported lifetime trauma, including domestic violence (25%) and physical (27%) or sexual (27%) assault by a family member or stranger (Walters & Simoni, 1999). A mail-in survey at a community-based agency in New York City indicated that 51% of 169 female respondents had experienced some kind of abuse, either physical or sexual, in their lifetime (Simoni, Sehgal, & Walters, 2004). Moreover, a recent study with 112 AIAN women also in New York City showed that the majority of those in the sample (66%) experienced at least one form of interpersonal violence, and women who

had experienced interpersonal violence had high levels of traumatization at the time of the assault (Evans-Campbell, Lindhorst, Huang, & Walters, 2006).

Abuse of Native women often begins in childhood. Results from the few empirical studies that document the rates of childhood victimization among AIANs indicate that Native children are more likely to be abused and neglected than White children (Libby et al., 2004; National Indian Justice Center, 1990). Specifically, in a reservation-based sample in the Southwest, 2% of boys and 13% of girls experienced sexual abuse prior to the age of 15 (Kunitz & Levy, 2000; Kunitz, Levy, McCloskey, & Gabriel, 1998). In a more recent study of AIAN adults from two tribes, the prevalence of childhood physical abuse was approximately 7% for both sexes; childhood sexual abuse was higher for girls than boys (7.15 to 7.65% vs. 0.84 to 2.3%; Libby et al., 2004). Despite the disturbing rates of violence for adults and children, these numbers might actually underestimate the prevalence of violence, especially sexual violence that young and adult Native women endure (AI, 2007).

Two-Spirit Native Women: Triple Jeopardy

The term *two-spirit*, adopted in 1990 at the third annual spiritual gathering of lesbian, gay, bisexual, and transgender (LGBT) Natives, is embraced by many Native persons with a LGBT orientation (Anguksuar, 1997). The term provides a moniker for AIAN sexual/gender minorities that accentuates and validates a culturally distinct embodiment of their sexual and gender identity.

Two-spirit women must negotiate their triply oppressed status (Jacobs, Thomas, & Lang, 1997). Often, they confront stigma regarding their sexual orientation, not only from the wider society but also from other Natives, their families, and their tribal communities; racism from the wider society and from other sexual minorities; and sexism from both Native and LGBT communities. Facing multiple aspects of oppression, two-spirit individuals not surprisingly are at even greater risk for adverse health outcomes than other Natives (Balsam, Huang, Fieland, Simoni, & Walters, 2004; Walters, 1997; Walters, Simoni, & Horwath, 2001). Despite this increased risk, however, public health and psychological research largely has ignored two-spirit people. Thus, gathering data on two-spirits, including their experiences of abuse and violence and its effects, is an important area for research.

The literature on sexual minority (predominantly White) populations reveals a stark portrait of abuse. Compared to heterosexuals, they report higher rates of sexual trauma in both childhood (e.g., Balsam, Rothblum, & Beauchaine, 2005; Hughes, Haas, Razzano, Cassidy, & Matthews, 2000; Roberts & Sorensen, 1999; Tomeo, Templer, Anderson, & Kotler, 2001) and adulthood (e.g., Balsam et al., 2005; Duncan, 1990; Tjaden, Thoeness, & Allison, 1999). Indeed, two recent large national studies showed elevated frequency, severity, and persistence of childhood abuse (Austin et al., 2008) and higher risk of experiencing violence in their lifetime (Moracco, Runyan, Bowling, & Earp, 2007) among lesbian and bisexual women compared to heterosexual women. Studies also show that lesbians report higher rates of physical assault compared to heterosexual women (Tjaden et al., 1999). Moreover, in one community sample, 19% of lesbians reported at least one incident of physical victimization

in their lifetime that they perceived to be related to homophobic bias (Herek, Gillis, & Cogan, 1999).

Research with AIAN sexual minorities confirms their disproportionate risk of violence. In a small study of urban two-spirits, violence due to sexual orientation included disproportionately high levels of self-reported assaults, with 36% of respondents reporting having been physically assaulted, 36% assaulted with a weapon, and 29% sexually assaulted (Walters et al., 2001). In a study of two-spirits in Canada, one-third of the two-spirit men reported being “gay bashed” (Monette, Albert, & Waalen, 2001). In an urban sample in the United States, gay, bisexual, and two-spirit men were more likely than their heterosexual counterparts to report being sexually and physically victimized; specifically 45% versus 2% reported sexual abuse or assault by someone other than a spouse/sexual partner (Simoni, Walters, Balsam, & Meyers, 2006). In a study of 179 AIAN men and women in New York City, Balsam et al. (2004) reported that two-spirit participants reported significantly higher rates of childhood physical abuse than their heterosexual counterparts (48% vs. 25%).

In a small qualitative study of two-spirit Native women, traumatic stressors, in particular stressors associated with overt racism, heterosexism, and sexism, were prevalent in the narratives (Walters, Evans-Campbell, Simoni, Ronquillo, & Bhuyan, 2006). Participants reported experiencing violence and discrimination in multiple forms, from verbal insults to physical attacks. Often, the two-spirit women did not know which aspect of their identity provoked the attack. For example, one woman noted,

Sometimes it is really hard to tell, you know ... I've been called a dyke ... and a f**king squaw ... don't know sometimes why I'm being attacked. I just know that I'm wrong to a lot of people ... I think there's a lot of hostility to the combination of things I am. (Walters et al., 2006, pp. 143–144).

Effect of Violence on Mental and Physical Health

Mental health problems are more frequent and more severe for women with victimization histories than for women without such histories (Logan, Walker, Jordan, & Leukefeld, 2006). For example, sexual abuse is related to higher levels of depression among clinical and nonclinical samples (Finkelhor, 1984) and to greater psychopathology among AIANs specifically (Robin, Chester, Rasmussen, Jaranson, & Goldman, 1997). In addition to contributing to a variety of mental health problems, trauma is also associated with numerous physical problems. According to one study of almost 2,000 women in primary care, women abused by their partners had more physical symptoms (beyond the effects of the abuse itself) than other women (McCauley et al., 1995). This research team also found similar patterns of significantly increased physical problems for women who reported versus did not report histories of childhood abuse (McCauley et al., 1997).

The effects of abuse could be especially acute for two-spirit women, as AIANs experience worse overall physical health than other women. Indeed, in a study with over 100 AIAN women examining the relationship between trauma and mental health, women who had a history of sexual assault were significantly more likely than others to report ever having been depressed or dysphoric and were more likely to engage in HIV sex risk behaviors

(Evans-Campbell et al., 2006). Preliminary evidence indicates that violent victimization is related to depression, posttraumatic stress disorder, suicide attempts, and alcohol use among AIAN women (Hamby & Skupien, 1998). The effect of violence on the health of two-spirit women specifically has yet to be empirically examined.

Mastery: “Indigenist” Versus Western Conceptions

The colonial oppression that AIAN peoples have endured has included successive attacks on their boundaries, including violations of: geographic boundaries in the form of forced relocations; community boundaries through the placement of different and at times warring tribes on the same reservation; familial boundaries with American Indian residential schools and transracial adoptions; personal boundaries in the case of sexual and physical abuse; and spiritual boundaries due to forced Christianization and the outlawing of Native spiritual practices (AI, 2007; Churchill, 1996; Jaimes & Halsey, 1992; Tinker, 1993).

For some AIANs, the colonial legacy of boundary violations has led to the erosion of personal agency or what Western scholars have identified as mastery. *Mastery*, in the mainstream psychological literature, refers to an individual's actual or perceived control over significant life circumstances and may be seen as a personal resource in coping with life stressors (Pearlin, Lieberman, Menaghan, & Mullan, 1981; Pearlin & Schooler, 1978). Mastery also has been defined as an individual's ability to reduce physical and psychological manifestations caused by stress and to mobilize or develop internal and external resources that diminish the stressful threats (Caplan, 1981). Empirical research, mainly on Western samples, suggests that an individual's sense of agency in relation to the environment has been linked to many outcomes including life satisfaction, mental health, and physical health (Pearlin et al., 1981; Ross & Mirowsky, 1989). In a recent study examining the role of mastery among Australian Aborigines, mastery was related to both perceived stress and health outcomes (Daniel, Brown, Dhurrkay, Cargo, & O'Dea, 2006). To perceive oneself as having the power to elicit desired outcomes has been proposed as the basis of mastery (Marshall & Lang, 1990).

By the Western definition, oppressed populations will never have a strong sense of mastery because they face structural power inequities that limit their power to elicit desired outcomes. However, on an individual level, summoning one's cultural ways of coping and working through the traumatic event may be seen as aspects of mastery. Mastery from an indigenist perspective might involve mobilizing familial, social, cultural, psychological, and spiritual resources that diminish the impact of a stressor such as a violent assault. An indigenist perspective of mastery acknowledges that limited power to effect structural change does not preclude an individual exercising agency. In fact, for many North American tribes, exercising individual agency is an ancestral mandate according to which individual behaviors in the present have consequences for future generations (e.g., the Haudenosaunee seventh-generation principle, Graham, 2008).

According to either conceptualization, mastery may serve as a mediator of the relationship between abuse and worsened health outcomes. AIAN women who have been sexually or physically violated may avoid negative health outcomes if they can sustain or develop a

sense of mastery. Finkelhor and Baron (1986) identified powerlessness, or a lack of control over one's body, as a core manifestation of trauma. In this way, abuse may lead to a diminished sense of mastery, which may explain poorer health. Empirical studies report mixed findings, with some demonstrating significant associations between abuse and a sense of mastery (e.g., Bolstad & Zinbarg, 1997; Simoni & Ng, 2002) and others showing nonsignificant associations (e.g., Porter & Long, 1999; Silliman, 1993).

In the present study, a national sample of urban two-spirit AIAN women were interviewed to determine the extent of abuse they had experienced in their lives and the association of abuse with physical and mental health outcomes. The role of mastery, or a woman's perception of control over her life, also was explored as a likely mediator of this association between abuse and worsened health outcomes. We expected abuse to be associated with worse mental and physical health, and for this relationship to be at least partially accounted for by mastery.

Method

Participant Recruitment and Interviewing

The data were collected as part of the HONOR Project, a National Institute of Health-funded Native-run study of two-spirit individuals in seven urban sites across the United States: New York City, Los Angeles, San Francisco/Oakland, Tulsa/Oklahoma City, Denver, Minneapolis-St. Paul, and Seattle/Tacoma. The overall purpose of the larger study was to examine an indigenous model for two-spirits encompassing stressors (e.g., historical trauma, discrimination, abuse); coping (e.g., AIAN identity, spirituality, traditional healing); and physical and mental health outcomes (e.g., HIV risk, alcohol and other drug abuse, anxiety). For the current study, we examined only data relating to abuse, mastery, and health for the women in the sample.

Such a small and difficult-to-access population is virtually impossible to randomly sample. However, we aimed to minimize noncoverage, overrepresentation, and other selection biases with the use of targeted sampling within a respondent-driven sampling approach. In Seattle, the "census" site, the study was open to the entire two-spirit community, and individuals were recruited with posters, booths at relevant events, and word-of-mouth. At each other site, the study coordinator developed a list of 6 to 8 first-wave seeds who comprised men and women who varied in age and gender expression. A total of 36 first wave seeds were generated using targeted sampling, 33 of who participated. Participants also were solicited via agency newsletters as well as study brochures and posters. All participants provided information about their social networks to identify other potential participants. At the Seattle site, participants were given printed coupons and asked to give one to each social network member they identified who met the study criteria. At the other sites, approximately four eligible "nominees" were randomly selected from the participant's network lists to be contacted by the participant. For each such "nominee" who contacted the study staff, respondents were compensated \$10.00 (they were never informed which nominees responded). We achieved a total response rate of 80.1%. There were no sociodemographic differences between participants who self-referred versus those who were identified through the respondent-driven sampling procedures.

Eligibility requirements were: (a) self-identifying as American Indian, Alaskan Native, or First Nations and either being enrolled in one's tribe or having at least one-quarter in total American Indian blood quantum across tribes; (b) self-identifying as gay, lesbian, bisexual, transgender, or two-spirit or having had sexual relations with someone of the same sex during the past 12 months; (c) residing, working, or socializing in the study area; (d) being 18 years of age or older; and (e) speaking English.

Eligible individuals who provided written consent were enrolled in the study. Each respondent received \$65 for completing a 3 to 4 hr computer-assisted personal interview in a private location of their choosing. The interviewers (2 to 3 at each site) were socioeconomically diverse, ranging from professionals with graduate degrees to community members with little postsecondary education. Almost all were AIAN and two-spirit themselves and received extensive training prior to the study. They sat with interviewees while they completed the survey, respecting their privacy but remaining available to answer questions as necessary.

Participants

Of the 152 female respondents, 38% self-identified as lesbian, 45% as bisexual, and 17% as two-spirit. As these three groups of women did not differ on any of the main variables (all $ps > .05$), they were aggregated for all future analyses and hereafter collectively referred to as two-spirit. Their mean age was 41.6 years ($SD = 10.6$, range = 19 to 66), and the median monthly household income range was \$501 to \$1,000. In terms of their education, 20% had not graduated high school, 28% had graduated high school or received a GED, and 17% had some posthigh school courses but no degree. Thirteen percent were raised on reservation or tribal lands, 41% in an urban area, 20% in a suburban area, and 13% in a rural area. Over half identified themselves with one Native tribe (57%), whereas the rest identified with two or more tribes (43%). Fifteen percent were adopted, and 15% had attended American Indian boarding schools.

Measures

In addition to basic demographics assessed with standard formats, abuse, mastery, and mental and physical health were assessed.

Abuse—The Childhood Trauma Questionnaire (CTQ; Bernstein, Fink, Handelsman, & Foote, 1994) was used to determine histories of abuse and neglect. It inquires about five types of maltreatment with 28 items: emotional, physical, and sexual abuse and emotional and physical neglect. Each item is scored on a 6-point scale ranging from 0 (*never true*) to 5 (*always true*), with higher scores indicating more abuse and the items averaged to calculate an overall score. The CTQ has been used successfully and demonstrated good reliability with an American Indian woman sample (Duran et al., 2004). The CTQ also has demonstrated high convergence with the Childhood Trauma Interview (Fink, Bernstein, Handelsman, & Foote, 1995). In the current study, Cronbach's alpha for the CTQ was .94. Correlations between the subscales ranged from .34 to .73. Because of high collinearity and a limited sample size, the overall CTQ score was used in all analyses.

The Index of Spouse Abuse, Partner Abuse—The Index of Spouse Abuse–Physical Scale (ISA–P) was used to determine the presence of partner violence (Hudson, 1990). We used Coker and colleague's (Coker, Pope, Smith, Sanderson, & Hussey, 2001) modified version of the ISA–P, which comprises 15 of the original 25 items assessing whether any of the participants' romantic or sexual partners ever abused them (e.g., pushed and shoved them, threw dangerous objects at them, or forced them to have sex). These items were scored as 1 (*yes*) or 0 (*no*) and summed to calculate one overall score. The ISA–P has been validated by previous studies (e.g., Attala, Hudson, & McSweeney, 1994) and the modified version has shown good internal reliability and convergent validity (Coker, Reeder, Fadden, & Smith, 2004). In the current study, Cronbach's alpha for the ISA–P was .93.

PDS—The Posttraumatic Diagnostic Scale (PDS; Foa, 1995) was developed to yield diagnostic information regarding posttraumatic stress disorder, and has shown satisfactory test–retest reliability, internal consistency, and convergent and concurrent validity. In this study, five items were taken from the PDS to identify additional abuse experiences. Using a yes/no format, participants indicated if they had ever (a) been sexually assaulted by a family member or someone they know, (b) been sexually assaulted by a stranger, (c) been physically assaulted (i.e., mugged, physically attacked, shot, stabbed, or held at gunpoint) by a family member or someone they know, (d) been physically assaulted by a stranger; and (e) had sexual contact before the age of 18 years with someone who was 5 or more years older.

Mastery—A variety of instruments have been developed to measure perceptions of personal control. We selected Pearlin and Schooler's (1978) mastery scale, as it is one of the most widely used and has been shown to exhibit reasonable internal reliability (Seeman, 1991) and good construct validity (Pearlin et al., 1981). The measure assesses generalized expectations about the extent to which one can influence events in one's life with seven items (e.g., “I have little control over things that happen to me”). Items are scored on a 4-point Likert-type scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*) and were averaged to arrive at a total score. The scale has been used successfully with a First Nations sample in Canada (Daniel, Cargo, Lifshay, & Green, 2004) and an indigenous group in Australia (Daniel et al., 2006). Cronbach's alpha was .73 in the present study.

Health Outcomes—Mental and physical health were assessed with the Medical Outcomes Study HIV Health Survey (MOS–HIV), a brief yet comprehensive measure of health-related quality of life (Wu, Revicki, Jacobson, & Malitz, 1997). The 35-item MOS–HIV assesses 10 dimensions of functioning and well-being, including physical functioning, social and role function (work), cognitive functioning, pain, mental health, energy, distress about health, quality of life, and overall health. None of the items in the scale specifically addresses the effect of HIV, so all were relevant for the current sample. A mental and physical health summary score has been developed from a study with an HIV-positive population to standardized *t* statistics with a mean of 50 and a standard deviation of 10, with higher scores indicating better health (Revicki, Sorensen & Wu, 1998). Data have supported the internal consistency reliability and construct validity of the instrument (Wu et al., 1997). In the current study, Cronbach's alpha was .94.

Results

Table 1 displays the means, standard deviations, and ranges for the main variables and their intercorrelations.

Prevalence of Abuse

The vast majority of participants reported a history of abuse. Specifically, 78% ($n = 118$) reported physical assault at some point in their lives: 70% by a family member or someone they knew, 67% by a stranger, and 59% by both. An even higher percentage (85% or $n = 128$) of the participants reported sexual assault: 74% by a family member or someone they knew, 63% by a stranger, and 53% by both. Many of the participants were multiply traumatized. In fact, 38% had experienced both physical and sexual assault by both strangers and family members or acquaintances, with a high correlation in the sample between having experienced sexual assault and physical assault, $r(150) = .42, p < .001$. Moreover, the abuse appears to have begun early in the lives of the participants, with 76% reporting sexual contact when they were younger than 18 with someone who was 5 or more years older.

To assess for possible subgroups of women at particular risk for abuse, we ran simultaneous regressions for each abuse outcome with the sociodemographics entered as a block. For these analyses, sexual orientation was coded as (1) lesbian, (2) bisexual, and (3) two-spirit; employment as (0) not employed, (1) employed part-time, and (2) employed full-time; current steady partner status as (0) no partner versus (1) have partner; and education, personal income, and age were entered as continuous variables. The logistic regression for ever being sexually assaulted was significant, $\chi^2(7, N = 1350) = 14.51, p < .05$, and indicated that older age was a significant predictor ($\beta = .07, p < .05$). The simultaneous regression for partner violence also was significant, $F(6, 129) = 3.50, p < .01$, and indicated older age ($\beta = .24, p < .01$), less education ($\beta = -.27, p < .01$), and less income ($\beta = -.22, p < .05$) were significant predictors. The overall equations for the three other abuse variables (i.e., physical assault, childhood trauma, and childhood sexual contact) with the sociodemographics as predictors were not significant.

Associations Between Abuse and Health

To contextualize our findings, we compared the mental and physical health summary scores for participants in the current sample to those from the sample on which measures were originally standardized, which consisted of HIV-positive mostly White men from two large clinical trials (Revicki et al., 1998). Two-sample t tests revealed that participants in the current study reported significantly lower overall mental, $t(1170) = -8.43$ and $t(1381) = -6.88, ps < .001$ and physical, $t(1170) = -7.75$ and $t(1381) = -5.11, ps < .001$ health scores compared to the HIV-positive individuals from each of these two samples, respectfully.

To assess for sociodemographic covariates, we ran two simultaneous regressions, one for mental health and the other for physical health, with the same block of sociodemographics as used in the earlier regressions (i.e., sexual orientation, age, education, employment, personal income, and steady partner status). The overall equation for mental health was significant, $F(6, 129) = 6.48, p < .001$, and indicated that better mental health was

significantly related to having employment ($\beta = .31, p < .01$). The overall equation for physical health was also significant, $F(6, 129) = 6.62, p < .001$, and indicated that better physical health was significantly related to having employment ($\beta = .23, p < .05$) and younger age ($\beta = -.38, p < .001$).

As can be seen in Table 1, physical assault, sexual assault, childhood trauma, and partner violence were significantly correlated with both worse mental and physical health; the fifth indicator or trauma, childhood sexual contact, was not. To examine whether women who reported multiple incidents of abuse were at greater risk for poorer health outcomes, we compared women who reported no physical assault, physical assault by either someone they knew or a stranger, and both types of assault on health outcomes. A between-subjects analysis of variance (ANOVA) showed significant differences among the groups with respect to mental health, $F(2, 151) = 3.08, p < .05$. Tukey's post hoc tests suggested that women who reported both types of physical assault ($M = 41.58, SD = 11.11$) scored lower on mental health than those who reported no physical assault ($M = 47.05, SD = 11.94, p < .05$). There were no significant differences with respect to physical health.

We also compared women who reported no sexual assault, sexual assault by either someone they knew or a stranger, and both types of assault on health outcomes. A between-subjects ANOVA showed significant differences among the groups with respect to mental health, $F(2, 150) = 6.92, p < .001$. Tukey's post hoc tests suggested that women who reported both types of sexual assault ($M = 40.20, SD = 11.08$) scored lower on mental health than those who reported one type of sexual assault ($M = 45.15, SD = 10.68, p < .05$) and than those who reported no sexual assault ($M = 48.59, SD = 8.85, p < .01$). In addition, there were also significant differences among the groups with respect to physical health, $F(2, 150) = 4.44, p < .05$. In particular, Tukey's tests suggested that women who reported both types of sexual assault ($M = 42.24, SD = 8.03$) scored lower on physical health than those who reported no sexual assault ($M = 47.37, SD = 6.58, p < .05$).

Mediation Analyses of Mastery

The potential mediating role of mastery in the abuse-health relationship was examined following recommendations by Baron and Kenny (1986). In these analyses, abuse (i.e., childhood trauma, partner violence, physical assault, and sexual assault) served as the independent variables, mastery served as the potential mediating variable, and mental and physical health summary scores served as the dependent variables. According to this method, there are four steps (performed with three regression equations) in establishing that a variable (e.g., mastery) mediates the relation between an independent variable (e.g., abuse) and a dependent variable (e.g., health). The first step is to show that there is a significant relation between the independent and dependent variables (Path C_1). The second step is to show that the independent variable is related to the mediator (Path A). The third step is to show that the mediator (e.g., mastery) is related to the dependent variable (e.g., health). This is represented by Path B, and it is estimated controlling for the effects of the independent variable on the dependent variable. The final step is to show that the strength of the relation between the independent and dependent variables is significantly reduced when the mediator is added to the model (compare Path C_1 to C_2). If mastery is a complete mediator, the

relation between abuse and health will no longer be significant after mastery is included in the model. If mastery is a partial mediator, the relation between abuse and health will remain significant but be significantly smaller when mastery is included. However, it is not enough to show that the relation between the predictor and outcome is no longer significant when the mediator is added to the model; rather, one of several methods for testing the significance of the mediated effect should be used, both for partial and full mediation effects, such as Sobel tests (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

Childhood trauma, partner violence, and physical assault each predicted the dependent measure of mental health (Path C₁) and the mediating variable of mastery (Path A). Mastery was not predicted by ever having been sexually abused (Path A), hence further mediation analyses with this variable were not conducted. When mental health was regressed onto both mastery and childhood trauma, mastery predicted changes in the dependent measure of mental health (Path B), and the strength of the relationship between childhood trauma and mental health was weakened but remained significant (see Table 2), indicating that mastery was a partial mediator of the relationship between childhood trauma and mental health. The same pattern was observed for mastery as a mediator of partner violence and mental health, such that when mastery was entered with partner violence, its strength in predicting mental health was weakened but remained significant. When mastery was entered with physical assault, the independent variable no longer significantly predicted the dependent variable (Path C₂), supporting the role of mastery as a full mediator. Moreover, Sobel tests (MacKinnon et al., 2002) were performed and results indicated that mastery was a significant mediator of childhood trauma ($z = -2.18, p < .05$), partner violence ($z = -1.94, p = .05$), and physical assault ($z = -2.0, p < .05$) and the outcome of mental health.

A similar, albeit weaker, pattern was supported for mastery mediating the relationship between abuse indicators and the dependent variable of physical health (see Table 2). In particular, childhood trauma, partner violence, and physical assault each predicted the dependent measure of physical health (Path C₁) and the mediating variable of mastery (Path A). When physical health was regressed onto both mastery and childhood trauma, mastery predicted changes in the dependent measure of physical health (Path B), and the strength of the relationship between childhood trauma and mental health was weakened but remained significant (see Table 2), indicating that mastery was a partial mediator of the relationship between childhood trauma and physical health. Similar patterns were observed for mastery as a mediator of partner violence and of physical assault, except in these two scenarios the abuse variables no longer significantly predicted physical health when entered with mastery (Path C₂), supporting mastery's role as a full mediator. Sobel tests indicated that the mediating role of mastery for both childhood trauma ($z = -1.81, p = .07$) and physical assault ($z = -1.73, p = .08$) approached significance when predicting physical health, but was nonsignificant for partner violence ($z = -1.60, p = .11$).

Discussion

To our knowledge, the current study is the first to report levels of physical and sexual trauma among two-spirit Native women. The extent of abuse in the sample is alarming: 78% of the women had been physically assaulted and 85% sexually assaulted. This prevalence is

four times higher than the estimate of lifetime assault among women in the general population (20%; United Nations Children's Fund, 1997) and approximately 50% higher than for mainly heterosexual Native women (51%; Simoni et al., 2004) and mainly White lesbian and bisexual women (15 to 53%; Balsam et al., 2005). This suggests the urgent need for community-based agencies specializing in trauma and abuse for this population.

In particular, women who were older were more likely to be sexually assaulted. Perhaps this reflects the longer period of time for potential abuse to occur; we did not collect data on age at time of abuse. In addition, older women and women with less income and education were more likely to experience partner violence. Perhaps these women are more dependent on their partners for financial support and have less economic power to avoid and leave a violent relationship and because of their age, less able to find more suitable partners.

Overall, women in the sample reported poor health; in fact, they reported poorer mental and physical well-being than two samples of men living with life-threatening HIV infection. As one might expect, older age was related to worse physical health and lack of employment was associated with worse mental and physical health. Indeed, it is difficult to acquire and maintain a job when one is not mentally or physically well.

Furthermore, physical assault, sexual assault, and higher levels of childhood trauma and intimate partner violence were associated with both worse mental and physical health. Moreover, multiple traumatized women reported poorer health outcomes. For example, women who reported sexual assault by someone known to them as well as by a stranger had worse mental health ($M = 40.20$, $SD = 11.08$) than women who were sexually assaulted by only one type of perpetrator ($M = 45.15$, $SD = 10.68$, $p < .05$).

Generally, results supported the expectation that mastery would serve as a mediator of abuse indicators and health variables. The mediator models were especially reliable in predicting mental health. In other words, abuse (i.e., childhood trauma, intimate partner violence, experience of physical assault) among two-spirit women was associated with a decreased sense of mastery or control, which in turn accounted for worse mental health scores.

The sexual assault measure did not predict mastery, and hence mastery was not supported as a mediator between this indicator and health outcomes. Nonetheless, it is worth noting that the measure of childhood trauma (the CTQ) included sexual abuse items, and the mediator role of mastery was supported for this measure. Moreover, the sexual assault measure was not a continuous variable, which would have resulted in greater power to detect an association. Hence, more research may be needed to identify whether mastery plays a role in the sexual assault-health relationship.

Some methodological limitations of the study are conceded. First, because of the retrospective cross-sectional design of the study, a causal relationship between abuse and the health variables cannot be confirmed. Indeed, the present findings can only suggest a causal pathway between abuse, mastery, and health variables. Longitudinal investigations are needed to assess the timing of the proposed relationships and confirm the causal sequence. Second, we relied on self-report in data collection, which is prone to participants' recall bias. For example, one's recollection of abuse and particular details may change over time. Third,

the collection of more detailed data on abuse, such as age and sex of the perpetrator and age of the participant at the time of the abuse, would have been informative and may have been useful in enhancing the predictive validity of abuse. For example, the measure of intimate partner violence, which asks whether any of the participants' romantic or sexual partners ever abused them, does not specify whether the partner committing the abuse was male or female.

Implications for Future Research

Despite its limitations, the study provides much needed information about a hidden and underserved population that has rarely been studied. The findings suggest mastery is an important construct to address among two-spirit women in terms of their healing from trauma. Indeed, a legacy of colonization and imperialism that has stripped AIAN communities of a general sense of self-determination has led many indigenous people to seek spaces in which they can foster their autonomy (Smith, 1999). Experiences of early and later abuse signify a cycle through which two-spirit women are stripped of or impeded in their sense of mastery, which has been shown to aid in resisting stress (e.g., Skinner, 1996) and, in this study, mediated mental health outcomes.

It has been suggested that in more collectivist cultures a more communally oriented versus individual sense of mastery may be more central to people's resiliency in facing stressful life circumstances (Lyons, Mickelson, Sullivan, & Coyne, 1998; Triandis, 1995). Because collectivist cultures view problem solving as best done through group effort and getting along with others, elements of successful stress resistance might be more culturally consistent if conceived within a communally based view of the self (Monnier, Hobfoll, Dunahoo, Hulsizer, & Johnson, 1998).

In one study comparing a communal versus an individual conception of mastery (i.e., "self-mastery"), the latter led to improved stress resistance for both Black and White inner-city women; however, it was more effective in the face of stress for White women (Ennis, Hobfoll, & Schroder, 2000). Perhaps more relevant is a study by Hobfoll, Jackson, Hobfoll, Pierce, and Young (2002), in which a measure of *communal-mastery* was constructed and defined as a sense that individuals can overcome life challenges and obstacles through and because of their being interwoven in a close, social network. They compared Native American women who differed on their self-reported levels of self-mastery and communal-mastery, finding that communal-mastery was a more effective means of stress resistance for these women than their sense of self-mastery. In this way, communal-mastery is a promising construct to investigate in future research as we gain a better understanding of the role of mastery in addressing trauma and health, especially among two-spirits. In particular, researchers should examine pathways to sexual and physical abuse among two-spirit women, as well as other mediators and moderators of the abuse-health relationship, such as other foci of mastery. Further clarification of the communal and individual pathways to health for two-spirit Native women may guide the development of more effective prevention and health promotion interventions for this group.

In our view, an indigenist perspective of mastery recognizes an individual's sense of agency both at the personal and community level. Although we did not assess communal-mastery in

the current study, we employed a widely used measure of mastery and found that mastery, conceived of at the personal level of agency, helped explain the relationship between abuse and health, especially mental health. Thus, mastery from this perspective is important, but may be only part of a bigger picture. For example, it is possible that a sense of communal-mastery, involving agency at the community level, may be more strongly related to physical health, in terms of one's ability to mobilize familial, community, and social resources. More important, both types of mastery can be developed even if at the present time Native women experience formidable structural barriers to exercising complete agency in their lives, including boundary violations at multiple levels and the failure of the criminal justice system to effectively protect them. Interventions at all levels are needed to improve the health status of Native women, though and might take on very different forms. On the individual and community level, counseling, psychotherapy, and group work might be appropriate. At the societal or structural level, social activism and legislative and policy changes are needed to fully empower Native women.

Implications for Practice

Abuse is a devastating and significant problem among two-spirit women. Not only were most of the women in the sample abused at some point during their lifetime, but they experienced abuse by multiple perpetrators, including family members, acquaintances, and strangers. There are serious consequences of abuse; recent research on violence against women has underlined the associations among abuse and substance abuse as well as mental disorders such as depression and PTSD (Campbell, 2002; Kendler et al., 2000; Saylor & Daliparthi, 2005). Abuse also has been associated with worse physical health, including acute health problems such as bruises and head injuries (Kilpatrick, Resnick, & Acierno, 1997) and nonpsychiatric medical diagnoses, such as infectious diseases and pain disorders (Walker et al., 1999). Moreover, abuse has been associated with health risk behaviors and social impairment among the general population. Clearly, the consequences of abuse are often severe, and this highlights the urgent need for interventions and preventions with two-spirit Native women that aim to both decrease levels of abuse and increase mastery.

Health care providers should assess past and current abuse and sexual orientation in their treatment of AIAN women. Identifying this population may be essential for a woman's mental and physical well-being given the high rates of trauma. Taking a woman's age and employment status into consideration may also be important. Indeed, employment may be related not only to AIAN women's physical health but also mental health, a finding that has been demonstrated in the broader literature on work and psychological health and well-being (Blustein, 2008).

Finally, those working with Native communities should consider how to incorporate mastery into prevention interventions in culturally meaningful ways. In other words, talking to two-spirit women about mastery in a socially relevant manner (e.g., placing it in context of their personal and collective histories as AIANs) may be especially effective. For example, AIAN women higher in mastery may be more likely to access and utilize services and feel more powerful in their role in the healing process—a further direction for future research. In addition, interventions that focus on and foster mastery may be one way of restoring and

strengthening psychological boundaries that have been violated. Indeed, as data on abuse and health among two-spirit women become available and as psychologists gain further insight into relevant mediators and moderators, this will hopefully allow us to reduce and eliminate such inequities and strive toward a safer and more just society.

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Table 1
Descriptive Data and Intercorrelations Among Main Variables for Lesbian, Bisexual, and Two-Spirit Native Women

Variable	%	M	SD	Range	1	2	3	4	5	6	7	8
1. Physical assault ^a	78	—	—	—	—	—	—	—	—	—	—	—
2. Sexual assault ^a	85	.42***										
3. Child sexual contact ^b	76	.17*	.29***	—	—	—	—	—	—	—	—	—
4. Childhood trauma ^c	2.35	1.22	0 to 5	.40***	.44***	.34***	—	—	—	—	—	—
5. Partner violence ^d	5.42	5.04	0 to 15	.38***	.37***	-.01	.15	—	—	—	—	—
6. Mastery	2.99	0.54	1.86 to 4	-.16*	-.16*	-.13	-.18*	-.17*	—	—	—	—
7. Mental health ^e	43.16	11.11	8.06 to 63.25	-.20*	-.29***	-.07	-.27**	-.29***	.60***	—	—	—
8. Physical health ^e	43.83	7.82	24.32 to 54.93	-.17*	-.24**	-.06	-.22**	-.19*	.28**	.46***	—	—

Note. N = 151 to 152, except for Variable 5, where N = 139 to 140. Statistics are Pearson correlation coefficients.

^a Percentages represent whether abuse had ever occurred in a woman's life. For correlations, scored .5 (assault by someone known or by stranger), 1 (both types of assault).

^b Represents sexual contact under age 18 with someone 5 or more years older. Scored 0 (no) and 1 (yes).

^c The Childhood Trauma Questionnaire.

^d The Index of Spouse Abuse, Partner Abuse-Physical Scale.

^e Summary health scores from the Medical Outcomes Study HIV Health Survey.

* p < .05.

** p < .01.

*** p < .001.

Table 2
Summary of Path Coefficients From Mediation Analyses of Abuse, Mastery, and Health Outcomes Among Lesbian, Bisexual, and Two-Spirit Native Women

Measure	Path A	Path B	Path C ₁	Path C ₂
Model 1: Predicting mental health				
Abuse				
Childhood trauma	-.18*	.57***	-.27***	-.17*
Partner violence	-.17*	.56***	-.29***	-.20**
Physical assault	-.17*	.58***	-.19*	-.09
Model 2: Predicting physical health				
Abuse				
Childhood trauma	-.18*	.24**	-.22**	-.18*
Partner violence	-.17*	.22**	-.19*	-.15
Physical assault	-.17*	.25**	-.17*	-.13

Note. Childhood trauma and partner violence were entered as continuous variables. Physical assault was scored as 0 (*has never been physically assaulted*) and 1 (*has been physically assaulted*). Sexual assault was not examined because of its lack of association with mastery.

* $p < .05$.

** $p < .01$.

*** $p < .001$.