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Risk and Protective Factors Associated with Personal Mastery Among Sexual Minority African American Female Sex Workers

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Abstract

Research among sexual minorities has traditionally examined problems such as substance use, HIV risk, mental health problems, and victimization. Among sexual minority street-based female sex workers, these vulnerabilities can be magnified. Grounded in theories of resilience, this study examines risk and protective factors associated with a high level of personal mastery among a vulnerable population of women. Data are drawn from baseline interviews from street-based African American female sex workers enrolled in a randomized intervention trial in Miami, Florida. We compare sexual minority (N=197) and heterosexual (N=365) women on measures of risk and protective factors; among sexual minority women we present logistic regression analyses which reveal that severe mental distress and HIV transmission risk are associated with low levels of personal mastery, while protective factors of transportation access and social support are associated with high levels of personal mastery. These findings suggest that these protective factors may potentially facilitate the development of personal mastery and represent beneficial avenues for intervention efforts.

Keywords

personal	mastery;	African A	American;	sexual	minority; sex w	vork	

Introduction

By all accounts, street-based female sex workers in the United States constitute an especially vulnerable population as they are often enmeshed in chronic patterns of substance use, sexual risk, mental distress, victimization, and homelessness (Baseman, Ross, & Williams, 1999; Davis, 2000; Gilbert et al., 2001; Inciardi & Surratt, 2001; Kurtz, et al., 2004; Surratt & Inciardi, 2004; Surratt, et al., 2005; Wenzel, Leake, & Gelberg, 2001). Street-based sex workers or exchangers are embedded in a complex of social situations that make them an

important population to reach with health and social services. Significant numbers have histories of childhood sexual and physical abuse, increasing their susceptibility to mental and emotional problems (El-Bassel, et al., 2001; Farley & Barkan, 1998; Gidycz, et al., 1993; Maher, 1997; Sterk & Elifson, 1990). Furthermore, violent victimization at the hands of "dates" (clients or "johns"), boyfriends and other predators, such as people living on the streets, passersby, or the police, continues to play a large role in their adult lives (Church, et al., 2001; Coston & Ross, 1998; Farley & Barkan, 1998; Kurtz et al., 2004; Surratt, et al., 2004). At the same time, they are at high risk for loss of social services and social support structures, including family, church (Dalla, 2001; Weiner, 1996) and stable housing (Spittal et al., 2003). In fact, many of these health and social disparities are multiple and co-occurring among populations of female sex workers (Carlson et al., 2012; Romero-Daza, Weeks, & Singer, 2003; Romero-Daza, Weeks, & Singer, 2005; Shannon & Csete, 2010; Shannon et al., 2008; Sterk & Elifson, 2006).

A variety of studies have shown that sexual minority women experience many of the same health disparities as female sex workers, such as higher rates of victimization, problematic substance use, sexual risk, and psychological distress compared to their heterosexual counterparts (Bell et al 2006; Cochran et al 2000; Drabble & Trocki 2005; Tucker, Ellickson, & Klein 2008). Specifically, women who report same-sex behaviors or identify as either lesbian or bisexual are more likely to be heavy alcohol users (Drabble, Midanik & Trocki, 2005; Meads, Buckley, & Sanderson, 2007), more likely to report tobacco and illicit drug use, and more likely to have histories of injection drug use (Burgess et al. 2008; Hillier et al. 2003; Lindley et al., 2008; McCabe, Hughes, & Boyd 2004; Meads, Buckley, & Sanderson, 2007; Saulnier & Miller, 1997). Sexual risk also tends to be elevated among sexual minority women, with some reports indicating higher numbers of current sexual partners, and more unprotected and transactional sex than among heterosexual women (Austin et al., 2008; Bell et al 2006). Sexual minority women also tend to display elevated rates of psychological distress, including anxiety and depression (Burgess et al., 2008; Wilsnack et al., 2008). It has been widely noted that the poorer mental health functioning observed among sexual minorities is likely grounded in experiences of discrimination and victimization, as well as lower social support, family rejection and marginalization (Corliss et al 2009; Mayer et al. 2008; Ryan et al. 2009).

Though many health and social disparities are well documented among female sex workers and sexual minority women, the ability to seek out resources for support, engage in successful coping, or utilize other protective factors in the face of risk or adversity are hallmarks of resilience (Obrist, Pfeiffer, & Henly, 2010; Ungar 2008). There are no apparent studies of resilience among sexual minority female sex workers, yet, evidence shows that stressful events can lead to positive growth and coping behaviors among sexual minority women, and especially sexual minority women of color (Bonet, Wells, & Parsons, 2007; Balsam 2003). While such resilient behaviors have not been well studied among street-based female sex workers in the United States, international research with female sex workers indicates that better health outcomes are associated with protective factors such as self-efficacy (Ghimire, et al., 2011; Guha et al., 2012) and that HIV prevention efforts may be more effective if education, health care, and social support services are made available (Scheibe, Drame, & Shannon, 2012; Li, et al., 2010). As a result, researchers have recently

advocated resilience-based interventions for HIV prevention and psychological functioning among female sex workers in China (Yuen, et al., 2013).

Within this context, this paper investigates resilience among a sample of street-based African American female sex workers in Miami, Florida. First, we examine measures of risk and protective factors, comparing sexual minority and heterosexual women. Next, we conduct logistic regression analyses to examine which risk and protective factors are associated with resilience among a sample of sexual minority African American women in the context of a sex work environment. In particular we sought to understand the contributions of risk factors, such as substance use, victimization, mental health problems, and HIV risk, and protective factors, including education, health care, transportation, and social support, to the expression of resilience, as measured by personal mastery. The aim of these analyses is to uncover potential avenues of intervention for this vulnerable population.

Methods

The data were drawn from a randomized clinical trial designed to test the relative effectiveness of two case management intervention protocols in linking underserved women with health and social services and reducing risk behaviors for HIV. Study enrollment began in May, 2007, and concluded in June, 2010. Overall, 562 eligible clients were enrolled into the study and completed baseline interviews.

Target Population and Study Eligibility

The target population for this intervention trial was drug-using African American female sex workers in Miami, Florida. Study inclusion was limited to African American women based on prior studies with sex workers in the Miami area, which indicated that African-Americans were two times more likely than sex workers of other race/ethnic groups to test HIV-positive (Surratt et al., 2005). Eligible clients were African American women ages 18 to 50 who had: a) traded sex for money or drugs at least three times in the past 30 days; and, b) used cocaine, crack, or heroin three or more times a week in the past 30 days.

Study Recruitment

Participants in the study were recruited using targeted sampling strategies (Waters & Biernacki, 1989). Recruitment was carried out by a team comprised of both professional outreach workers and active sex workers. The outreach staff was indigenous to the target recruitment areas, and several members of the team had prior experience conducting outreach for local community service agencies. In addition, the use of active sex workers as recruiters provided access to many locations on and off the primary strolls (locations where female sex workers solicit clients) where potential participants were found.

During the recruitment process, women who were interested in participating in the study were asked to call the field office and screen for eligibility. In total 1,889 women participated in a telephone screening, of which 837 were eligible. A total of 562 women ultimately participated in the study. Reasons why eligible women did not participate included not being interested or not coming to the baseline visit.

Study Procedures

Study recruiters made contact with potential participants in various street locations. Potential participants were asked to contact the field office for telephone screening for eligibility. Those meeting project eligibility requirements were scheduled for appointments at the project intervention center, where they were re-screened on arrival. After eligibility was confirmed, informed consent was obtained, followed by a structured face-to-face baseline interview lasting approximately one hour. Project staff completed the requirements for National Institutes of Health (NIH) web-based certification for protection of human subjects. Study protocols were approved by the University of Delaware (predecessor institution) and Nova Southeastern University Institutional Review Boards.

Data Collection and Measures

Interviews were conducted using computer-assisted personal interviews (CAPI). The Global Appraisal of Individual Needs (GAIN, v. 5.4; Dennis, et al., 2002) was the primary component of the standardized baseline assessment. This instrument captured demographic information, physical and mental health status, homelessness, foster care history, violence and victimization, as well as lifetime and 90 day measures of drug use frequency and sexual risk behaviors.

Sexual Orientation

Sexual orientation was assessed with the closed-ended question, "Do you consider yourself to be...?" For analyses, the responses of "lesbian," "bisexual," or "other" were categorized as "sexual minority," while responses of "heterosexual" or "straight" were categorized as heterosexual. Although we recognize that sexual identity is multi-dimensional, incorporating cognitive, emotional, and behavioral aspects, we chose to examine sexual minority membership as defined by lesbian, bisexual, or transgender identification. Other analyses, typically those with a public health focus, tend to emphasize behavioral aspects of sexuality. While there is some dispute among researchers regarding the appropriateness of examining cognitive versus behavioral aspects of sexuality (Young & Meyer 2005; Ford 2006; Pathela et al 2006), and recognition that concordance between identity and behavior varies (Ross et al 2003), our decision to focus on cognitive aspects of sexual identity was driven by the fact that, among female sex workers, sexual behaviors and partnering are often not matters of preference, but of economics and survival (Shannon et al. 2008; Inciardi 1995).

Risk Factors

The GAIN (Dennis, et al., 2002) contains General Mental Distress Scale, consisting of clinical measures of mental health based on DSM-IV symptom criteria: 9 items assess past year symptoms of depression, 4 items that asses somatic disorders, and 12 items assess past year symptoms of anxiety disorders (Bohlig & Dennis, 1996; Dennis, Chan, & Funk, 2006). Consistent with the aim of our analysis to uncover potential avenues for intervention, we dichotomized mental distress into "severe" and "not severe," the rationale being that a classification of "severe" distress most likely identifies individuals with a high probability of clinical diagnosis who are in need of formal intervention (Dennis, Chan, & Funk, 2006). Cronbach's alpha for this scale in the current sample was .868 and has been reported

elsewhere as .97 (Dennis, Chan, & Funk, 2006). Examples of questions include, "During the past 12 months, have you had significant problems with feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future?" and "During the past 12 months have you had significant problems with feeling very anxious, nervous, tense, scared, panicked or like something bad was going to happen?"

Substance dependence was measured using the TCU Drug Screen II (IBR, 2006). Comprised of 9 items measuring past year drug use severity, endorsement of three or more items approximates DSM-IV criteria for dependence. Cronbach's alpha for this measure in the current sample was .8 and has been reported elsewhere as .89 (Simpson et al., 2010). Examples of questions include, "During the last 12 months did you use larger amounts of drugs or use them for a longer time than you meant to?" and "During the last 12 months did you get so high or sick from drugs that it caused an accident or put you or others in danger?"

The GAIN (Dennis, et al., 2002) contains the General Victimization Scale (GVS), which is a 15 item measure of types of victimization experienced by the respondent (including lifetime physical, emotional and sexual victimization), the number of traumagenic factors involved in the victimization (including age at onset, duration, type and relation of perpetrator), and current worry about victimization. Cronbach's alpha of GVS in this sample was .717 and has been reported elsewhere as .86 (Titus, et al., 2003). Examples of questions include, "Has anyone ever hurt you by striking or beating you to the point that you had bruises, cuts, broken bones, or otherwise physically abused you?" and "Has anyone ever forced you to participated in sexual acts against your will, including a regular sexual partner, a family member, or friend?" Given the pervasive violence in the street-based sex work context (Kurtz et al., 2004; Surratt & Inciardi, 2010; Surratt et al., 2011), we chose to exclude the four "current worry" items in our instrumentation, as they were likely to be universally endorsed. As such, our GVS scale consists of 11 items in total. Higher values indicate increased victimization and/or increased traumatic factors associated with the victimization. For analysis, the measure was dichotomized into "severe" (endorsement of four or more symptoms) and "not severe."

HIV risk was measured by asking clients to report counts of past 90 day vaginal and anal sex times as well as counts of the number of vaginal and anal sex times in which a condom was used. The measure was dichotomized so that HIV risk was defined as one or more unprotected vaginal or anal sex times versus none.

Protective Factors

Health care coverage was assessed by asking clients if their medical expenses were covered by any type of insurance, court, or health program. Transportation access was selected as a protective factor because prior research among this population suggested that this resource is lacking and that having it would make engaging with health and social services less burdensome (Kurtz, et al., 2005). This measure was assessed by asking clients to identify their most common form of transportation. Clients who reported using their personal vehicle or using public transportation were categorized as having "more access," while clients reporting walking, biking, or depending on rides from others for the primary mode of transportation were categorized as "less access."

Social support was measured using the 19 item MOS Social Support Survey (Sherbourne & Stewart, 1991), which includes the domains of emotional/informational support, tangible support, affectionate support, and positive social interaction. Scores were calculated according to the scale's authors' guidelines, and were transformed to a 0–100 scale for comparison to published means. Cronbach's alpha for overall social support in this sample was .966 and has been reported elsewhere as .91 (Sherbourne & Stewart, 1991). Examples of questions include, "How often is it that you have someone you can count on to listen to you when you need to talk," and "How often is it that you have someone who hugs you?"

Resilience

Personal mastery (Pearlin & Schooler, 1978) measures the extent to which an individual believes life events or circumstances are under one's own control. It is a widely used measure consisting of 7 items, answered on a 5-point scale, which has been shown to have good internal reliability (Seeman, 1991) and construct validity (Pearlin, et al., 1981). Cronbach's alpha for personal mastery in the current sample was .561 and has been reported elsewhere as .75 (Scheier, Carver, & Bridges, 1994). Respondents are asked to agree or to disagree with statements such as, "There is really no way I can solve some of the problems I have," and "I can do just about anything I really set my mind to."

Recent studies have used personal mastery as a measure of resilience (Harmell et al., 2011), and as a coping resource, personal mastery is associated with improved mental and physical health, reduced risk of mortality, and reduced impact of chronic stress on disease (Roepke & Grant, 2011). Furthermore, additional reports have shown that higher personal mastery is associated with better health outcomes and stronger increases in social support (Gerstorf, Röcke, & Lachman, 2011). For analysis, this scale was used as a proxy for resilience based on the idea that the development of personal mastery is preceded by the cultivation of successful coping or other means of overcoming risk and is a product of these efforts (Younger, 1991). The range of the scale for this study was 11–35; higher scores represent higher personal mastery. For analysis, the measure was dichotomized at the 66th percentile with high personal mastery defined as the upper 33.3% versus low personal mastery (lower two-thirds).

Analytic Plan

All analyses were conducted using IBM SPSS Statistics version 20. Descriptive statistics were calculated for the variables of interest, including demographics, risk factors, protective factors and personal mastery by sexual minority identity. We hypothesized that high personal mastery would be associated with lower levels of risk factors and higher levels of protective factors. Bivariate logistic regression models were constructed to predict high levels of personal mastery by these risk and protective factors. Those measures that exhibited significant associations in the bivariate models were included in a multivariate logistic regression model, with the aim of the analyses being to focus on risk and protective factors that could be intervened upon to help these women. As a result, HIV-status and foster care history were not included in the multivariate analyses.

Results

Selected characteristics of the sample are shown in Table 1. The sample was 35.1% sexual minority (N=197) and 64.9% heterosexual (N=365). Mean age for sexual minority women was 36.56 (SD=9.31) compared to 39.26 (SD=8.50) for heterosexual women (P<0.000). Sexual minority women reported greater prevalence of risk factors compared to their heterosexual counterparts, including past 90 day homelessness (64.0% vs. 49.9%; P=0.001); severe mental distress (84.3% vs. 75.9%; P=0.020), and severe victimization (87.8% vs. 80.8%; P=0.034). No significant differences were found among protective factor measures, including social support which was similar for sexual minority women, 52.60 (SD=29.41) and for heterosexual women, 56.86 (SD=28.69; P=0.122); however, only 27.4% of sexual minority women endorsed the criteria for high personal mastery (N=54) compared to 36.4% of heterosexual women (N=133; P=0.030).

Based on the elevated levels of risk factors among sexual minority women, bivariate logistic regression models were constructed to examine high personal mastery by risk and protective factors among this population. These analyses are based on the hypothesis that high personal mastery would be associated with lower levels of risk factors and higher levels of protective factors. Results are shown in Table 2.

Past 90 day homelessness (OR=0.444; 95% CI=0.234, 0.844; P=0.013), severe mental distress (OR=0.118; 95% CI=0.051, 0.275; P<0.000), and HIV risk (OR=0.440; 95% CI=0.230, 0.841; P=0.013) were associated with lower odds of having high personal mastery. Transportation access (OR=2.591; 95% CI=1.205, 5.573; P=0.015) and greater social support (OR=1.025; 95% CI=1.013, 1.038; P<0.000) were associated with higher odds of high personal mastery.

Measures that exhibited significant bivariate associations were included in a multivariate logistic regression model, with the aim of identifying risk and protective factors as potential avenues for intervention. Table 3 shows the results of the multivariate logistic regression model predicting a high level of personal mastery among African American sexual minority female sex workers. Two risk factors, severe mental distress (OR=0.146; 95% CI=0.057, 0.378; P<0.000) and HIV risk (OR=0.455; 95% CI=0.218, 0.952; P=0.037), remained associated with lower odds of having high personal mastery. The protective factors associated with high personal mastery were transportation access (OR=2.570; 95% CI=1.040, 6.352; P=0.041) and greater social support (OR=1.021; 95% CI=1.007, 1.036; P=0.003).

Discussion and Conclusion

Findings from this study document the presence of personal mastery, and associated protective factors among a sample of African American sexual minority street-based female sex workers. All of the women in our sample, regardless of sexual identity, reported high levels of risk including recent homelessness, severe mental distress, substance dependence, severe victimization, and HIV risk. However, a significantly higher percentage of sexual minority women reported recent homelessness and met criteria for severe mental distress

and severe victimization than heterosexual women. In addition, fewer sexual minority women reported high personal mastery.

Given the prevalence of risk among female sex workers, our analysis focused on sexual minority women, who appeared to be most vulnerable women in this African American sample. The present study contributes to previous examinations of female sex workers and sexual minority women by demonstrating that in spite of multiple risk factors, many women express feelings of control which are related to lower levels of risk. While previous research has demonstrated that sexual minority women demonstrate resilient behavior as a means of coping with trauma or stress (Bonet, Wells, & Parsons, 2007; Balsam 2003), ours is the first study to examine personal mastery among such a vulnerable population of sexual minority women. As such, this approach reveals the way in which protective factors influence personal mastery and contributes to the study of resilient behaviors.

The overall pattern of results was that risk factors are negatively associated with high levels of personal mastery, while protective factors have a positive association. This is consistent with recent literature that has used a resilience framework to examine health disparities and outcomes (Moskowitz, 2010; Obrist et al., 2010; Pargament & Cummings, 2010). However, ours is the only study to employ this perspective among this vulnerable population of African American sexual minority women, and it extends the research focused on similar drug-using female sex worker populations in the United States.

Health and social disparities due to structural inequality in access to social, educational, or material resources are well documented among African American and street-level sex worker populations (Baer, Singer, & Susser, 1997; Romero-Daza, et al., 2003; Romero-Daza, et al., 2005). Our results identify specific targets for intervention at the individual level to assist sexual minority female sex workers in coping with risk factors and achieving better health outcomes. Protective factors, such as transportation access or social support could potentially facilitate the development of personal mastery and represent beneficial avenues for intervention efforts. Because of the strong negative association between severe mental distress and personal mastery, and also between HIV risk and personal mastery, approaches that enhance personal mastery are likely to have a beneficial effect on these risks as well.

To address these issues, community organizations and social service providers should consider the value of indirect intervention approaches to reduce risks for substance use and HIV, in the promotion of health behaviors and reduction of risk such as facilitating access to transportation. Our results indicate that transportation access had a considerable positive association with high levels of personal mastery in both the bivariate and multivariate logistic regression models. Female sex workers in Miami report a lack of transportation access and note that it is a barrier to obtaining needed health and social services (Kurtz et al., 2005). Additional research has shown that lack of transportation access can be a major barrier to social service utilization and positive health outcomes (Hoerster et al., 2011; Sagrestano, Clay, Gooch, Finerman, & Rapino, 2012), especially for African Americans (Probst, Laditka, Wang, & Johnson, 2007). Interventions that assist vulnerable women in

accessing reliable transportation could further reduce risk and make health services utilization, including HIV testing and treatment, a more feasible practice.

The enhancement of informal and formal social support networks would likely reduce risk factors among sexual minority female sex workers. Our measure of social support included four domains: emotional/informational support, tangible support, affectionate support, and positive social interaction. Social support scores tended to be lower than national norms among patients with chronic illnesses (Sherbourne & Stewart, 1991). This is likely due to the prevalence of social conditions of unstable housing, substance use, poverty, violence, social isolation, and disconnection from the community among this population (Surratt & Kurtz, 2012; Surratt et al., 2011). Among sexual minority African American women in the general population, supportive social relationships were found to be a key factor in facilitating resilience in spite of multiple structural-level social stressors such as homophobia and racism (Bowleg et al., 2003). For highly marginalized female sex workers, social support may be even more crucial for expressions of resilience. Findings from a risk reduction intervention study among street-based sex workers in Miami suggested that social support from peer counselors facilitated better engagement with and retention of the interventions (Surratt & Inciardi, 2010). Similar results were found among vulnerable sexual minority African American men (Buttram, Kurtz, & Surratt, 2013). Thus, small efforts to address the lack of social support in any intervention are apt to have a positive impact. In addition, research has demonstrated that a lack of positive social interaction has a negative effect on the initiation of HIV care after a recent diagnosis (McCoy et al., 2009). With the increasing adoption of HIV prevention initiatives such as Treatment as Prevention (Cohen et al., 2011), this could be an important domain to include in such interventions for high risk populations, such as street-based female sex workers.

These results should be viewed in the context of several limitations. The data were gathered through self-report, potentially leading to underreporting of socially undesirable behaviors or reporting biases. We are confident that the use of specially trained female staff mitigated such deficiencies, though caution is warranted in interpretation. In addition, data presented here are cross-sectional which limits our ability to make causal inferences among the key variables. Finally, though the study contained a large sample, women who participated may not have been representative of all street-based sex workers in Miami, and the findings may not be generalizable to other sex worker populations.

Despite these limitations, this study provided substantial evidence of protective factors among street-based sexual minority African American female sex workers experiencing multiple risk factors. Responsive policies must be developed to address the lack of formal advocacy organizations that serve this marginalized and resource-poor population, and provide assistance in accessing mental and physical health care and social services. Though some organizations of this type exist in a handful of other U.S. cities, the presence of such organizations in Miami is not apparent. In addition to recommendations for intervention and public health policy, these analyses also highlight the need for additional research. Comprehensive examinations of female sex workers and other vulnerable populations should investigate social or environmental protective factors that enhance individual capacity to cope with adverse conditions that lead to better health outcomes. Such a focus on

resilient behavior would produce valuable insights into the mitigation of risk factors, which would further inform intervention design, public health policy and social service providers.

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Table 1

Selected characteristics of street-based African American female sex workers (N=562)

	Sexual r	Sexual minority	Heterosexual	sexual	Chi-square	Ь
	N=197	35.1%	N=365	64.9%		
Demographics						
HIV-positive	32	16.2%	99	18.1%	0.300	0.584
Foster care history	41	20.8%	55	15.1%	2.98	0.084
Risk Factors						
Homeless (past 90 days)	126	64.0%	182	49.9%	10.264	0.001
Severe mental distress	166	84.3%	277	75.9%	5.375	0.020
Substance dependence	179	%6.06	322	88.2%	0.924	0.336
Severe victimization	173	82.8%	295	80.8%	4.495	0.034
HIV risk	86	49.7%	184	50.4%	0.023	0.880
Protective Factors						
Education - 12 years or more	93	47.2%	177	48.5%	0.085	0.771
Health care coverage	99	33.5%	120	32.9%	0.023	0.880
More access to transportation	134	%0.89	250	68.5%	0.013	0.908
Resilience						
Personal mastery (66th percentile)	54	27.4%	133	36.4%	4.696	0.030

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 $\label{eq:Table 2} \textbf{Bivariate logistic regression models predicting high levels of personal mastery among African American sexual minority female sex workers (N=197)}$

	OR	95% CI	p
Demographics			
HIV-positive	2.431	[1.110, 5.323]	0.026
Foster care history	0.303	[0.112, 0.820]	0.019
Risk Factors			
Homeless (past 90 days)	0.444	[0.234, 0.844]	0.013
Severe mental distress	0.118	[0.051, 0.275]	0.000
Substance dependence	0.980	[0.332, 2.893]	0.971
Severe victimization	0.906	[0.353, 2.323]	0.837
HIV risk	0.440	[0.230, 0.841]	0.013
Protective Factors			
Education - 12 years or more	1.167	[0.623, 2.183]	0.630
Health care coverage	1.725	[0.903, 3.295]	0.098
More access to transportation	2.591	[1.205, 5.573]	0.015
Social Support	1.025	[1.013, 1.038]	0.000

Table 3

Multivariate logistic regression models predicting high levels of personal mastery among African American sexual minority female sex workers (N=197)

	OR	95% CI	p
Risk Factors			
Homeless	1.249	[0.546, 2.853]	0.598
Severe mental distress	0.146	[0.057, 0.378]	0.000
HIV risk	0.455	[0.218, 0.952]	0.037
Protective Factors			
Transportation access	2.570	[1.040, 6.352]	0.041
Social Support	1.021	[1.007, 1.036]	0.003