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Sex Trading Among Hazardously Drinking Jailed Women

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Abstract

For women involved in sex trading, both alcohol problems and passage through the criminal justice system are highly prevalent. This study is the first to conduct a focused examination of factors associated with sex trading among hazardously drinking, pretrial, jailed women. Cocaine use, social support for alcohol abstinence, and more days incarcerated in the 90 days leading up to the index incarceration were significantly associated with sex trading involvement among alcoholic women. Helping incarcerated alcoholic women reduce cocaine use and improve sober support networks during and following an incarceration may minimize sex trading after release.

Keywords

Women; Alcohol; Incarceration; Jail; Sex Trading

Alcohol use is a key factor associated with women engaging in the sex trade industry (e.g., Baker, Dalla, & Williamson, 2010; Clarke, Clarke, Roe-Sepowitz, & Fey, 2012; Mansson & Hedin, 1999; McClanahan, McClelland, Abram, & Teplin, 1999; Li, Li, & Stanton, 2010b). The link between alcohol use and sex trading is bolstered by reports that problematic alcohol use has been associated with entry into sex trading (Pedersen & Hegna, 2003; Silbert, Pines, & Lynch, 1982), reports of forced and consensual use of alcohol by sex workers to facilitate sex with customers (e.g., Li et al., 2010b), and use of alcohol to cope with stressors associated with the occupation (Gossop, Powis, Griffiths, & Strang, 1994). Indeed, in a review of alcohol use among female sex workers, the authors noted that both quantitative and qualitative research converge to demonstrate that high rates of problematic alcohol use are prevalent among women who engage in sex trading (Li et al., 2010b).

In turn, sex trading and substance use are both associated with involvement in the criminal justice system (El-Bassel, Simoni, Cooper, Gilbert, & Schilling, 2001). It is also notable that the vast majority of women who are arrested spend time in jail (Minton & Golinelli, 2014) rather than prisons (Carson, 2014), making a focus on pretrial jail detainees particularly relevant for evaluating factors influencing sex trade involvement among alcoholic women who are criminally involved. Given the high prevalence of both sex trading and alcohol and

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other illicit substance use among justice-involved women, it is important to understand factors relating to sex trading in this population. Utilizing the guiding theoretical framework of the Theory of Gender and Power, the current study provides the first analysis of factors associated with sex trading among hazardously drinking jailed women prior to an index incarceration.

Factors Influencing Sex Trade Involvement

Previous research on justice involved women suggests that trauma history, substance abuse, and current situational or economic factors are associated with participation in sex trading (El-Bassel et al., 2001; Gilchrist, Gruer, & Atkinson, 2005; Golder & Logan, 2007; Gossop et al., 1994; McClanahan et al., 1999; Roe-Sepowitz, Hickle, Loubert, & Egan, 2011; Silbert et al., 1982). Although various theoretical models examining contributors to sex work have been proposed (e.g., Cimino, 2012; Mansson & Hedin, 1999; Williamson & Folaron, 2003), previously tested models have not incorporated a focus on gender-based inequalities that afflict women who engage in sex trading. Gender inequities, in combination with inequities associated with race and class, alcohol and drug involvement, low levels of education, and unemployment can contribute to a situation in which transactional sex is one of few viable ways to meet one's economic needs (Golder & Logan, 2007). Therefore, it would be helpful to organize predictors of sex trading within a theoretical model that accounts for the disparities in power which women in general, and women who engage in sex trading, in particular, face.

The Theory of Gender and Power conceptualizes women's risks and behaviors within the social context of women's lives (Connell, 1987). This theory has been used to understand how the balance of gender and power influences risky sexual behavior, particularly behavior heightening risk for HIV transmission (Wingood & DiClemente, 2000). The Theory of Gender and Power identifies three divisions that contribute to risk behaviors in the context of a power imbalance due to gender inequalities: (1) division of labor; (2) division of power; and (3) relational, behavioral, and emotionally normative components.

In the Theory of Gender and Power, sexual division of labor refers to the gendered assignment of women to certain professions. Indeed, women are often compensated less than men for similar jobs (DeNavas-Walt, Proctor, & Smith, 2013), or are relegated to jobs that are considered “women's work”, a notion that has historically included sex trading. As a result of this division of labor, women may have fewer financially lucrative career options relative to men, potentially limiting their ability to exit sex trading. One factor that might influence financial success is women's educational backgrounds, including years of education and a history of special education (which is associated with poorer employment outcomes; e.g., (Heal & Rusch, 1995). Furthermore, family structure and experiences (i.e., having young children in the home or a history of having been placed in foster care which can mean significant instability in one's own early childhood) could inhibit one's ability to obtain sufficient and adequate education and employment. Previous research has shown that substance-using incarcerated women have less education, poorer employment histories, and more disruption in their families of origin than do substance using incarcerated men (Langan & Pelissier, 2001; N. Messina, Burdon, Hagopian, & Prendergast, 2006). Factors influencing

employment potential have important sequelae, including the ability to generate income, and therefore are critical to consider as factors influencing involvement in sex trading.

The structure of sexual division of power is closely linked with sexual division of labor. Power may be viewed as both interpersonal (i.e., the ability to influence others), and institutional (i.e., the ability to influence one's own life), and refers to structural limitations that prevent women from asserting control over choices. As suggested by previous authors describing the Theory of Gender and Power (Wingood & DiClemente, 2000), factors influencing interpersonal power may include past traumatic events. Indeed, previous research has identified trauma histories and adult victimization as significant correlates of involvement in sex trading (Gilchrist et al., 2005; Golder & Logan, 2007). Institutional factors influencing power would include prior incarceration, which, as noted previously, is more common among women who engage in sex trading than women who do not (e.g., Golder & Logan, 2007). Moreover, incarcerated women are more likely to have experienced physical and sexual abuse than are incarcerated men (N. Messina et al., 2006; N. P. Messina, Burdon, & Prendergast, 2003). In addition, behavioral risk factors, including use of addictive substances (i.e., alcohol, opioids, benzodiazepines, cocaine, marijuana), further the sexual division of power (p. 543, Wingood & DiClemente, 2000). Incarcerated women in substance use treatment used drugs more frequently, used harder drugs and used for different reasons than men (Langan & Pelissier, 2001) and they also have more severe drug use histories (N. Messina et al., 2006; N. P. Messina et al., 2003). Given that lifetime trauma, prior experiences of incarceration, and substance use can all interfere with women asserting control over their own choices, these experiences can be considered to reflect unfavorable sexual division of power for our target population.

Finally, the Theory of Gender and Power conceptualizes relational, behavioral, and emotionally normative components as influencing risky sexual behaviors by creating a social context that supports continued involvement in sex trading. Important relational and behavioral risks related to involvement in sex trading could include whether women have a strong sense of general social support and what types of behaviors might be supported or proscribed within their social network (i.e., social norms). For example, a support network that encourages ongoing substance use and/or living with a partner who uses addictive substances create norms that support continued risky behavior. Previous research has shown that substance-using, incarcerated women have more network (including partner) support for substance use than do substance-using, incarcerated men (Langan & Pelissier, 2001) which could influence likelihood of continued involvement in sex trading.

This study of hazardously drinking incarcerated women is a secondary analysis evaluating factors associated with sex trading prior to an index incarceration period among pretrial jail detainees. This is the first study to use the theoretical framework of the Theory of Gender and Power to guide model building and to examine factors associated with sex trading among jailed women with alcohol problems. We predicted that variables derived from the three domains of the Theory of Gender and Power would be significantly associated with reports of involvement in sex trading.

Methods

Study Design

The larger study from which the current data were drawn was designed to test a brief alcohol intervention targeting reduction in alcohol use and HIV risk among female pretrial jail detainees with hazardous alcohol drinking patterns (e.g., Hebert et al., 2008; Stein, Caviness, Anderson, Hebert, & Clarke, 2010). All participants were recruited within the first three days of this index incarceration at the Rhode Island Department of Corrections (RI DOC) Adult Correctional Institute (ACI). Women were recruited from 2004 to 2007, and all jailed, unsentenced women detained in the women's facility at the RI DOC during this period were screened for eligibility. Eligibility criteria included (1) English speaking, (2) ability to provide contact information, (3) endorsement of risky heterosexual behavior (non-universal condom use during anal or vaginal sex in the last 90 days), (4) reports of hazardous alcohol consumption (i.e., consumption of 4 or more drinks; (Alcoholism, 2005) at a time on 3 or more occasions in the prior 3 months, or a total score of 8 or greater on the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, & de la Fuente, 1993).

Study participants all completed a baseline assessment and were then randomized to one of two conditions. The current study uses data from the baseline assessment only.

Participants

Over the course of the study, 1,415 women were screened, and a large number (n=1,133) were ineligible; 37 women refused to participate, leaving the final study sample size of 245 women. Ineligibility resulted from the approximately 15% (n= 212) of women who had no HIV risk (i.e., did not endorse risky heterosexual behavior), the 33% (n= 467) who had no alcohol risk, the 24% (n= 340) who had no HIV or alcohol risk, and the 10% who were ruled out for various other reasons (e.g., were not English speaking). For a more detailed description of recruitment methods, please see (Hebert et al., 2008; Stein et al., 2009; Stein et al., 2010).

Measures

Involvement in Sex Trading—The two items querying trading sex for money and/or drugs were taken from the Risk Assessment Battery (Metzger, Woody, & Navaline, 1993). Participants were asked at the baseline interview how often they had traded sex for money, or sex for drugs, in the 90 days prior to their current incarceration period. Response options ranged from (0) never to (7) more than once a day. These 2 items were collapsed and dichotomized to create a variable depicting whether participants had ever traded sex for either drugs or money in the prior 90 days.

Demographic Characteristics—Demographic characteristics assessed included age and race/ethnicity.

Charges—Information about the nature of arrest charges were compiled from data gathered in daily checks of the intake report at the Adult Correction Institute (ACI).

Sexual Division of Labor Measures

Education was operationalized as number of years of completed education.

Special Education involvement was assessed with a yes/no question: "Did you ever go to special ed. classes or work with a resource teacher outside your regular classroom?"

Living with a child under the age of 14 was assessed with the following question: "How many of your children under the age of 14 live with you?" Responses of 1 or more were coded as "yes" for having a child under the age of 14 living with the participant; responses of 0 children under the age of 14 living with a participant were coded as "no" for this item.

Any foster care was captured with a single yes/no item: "When you were younger, did you ever stay in foster care?"

Income and employment were not captured in this dataset, and therefore were not able to be evaluated within this model domain.

Sexual Division of Power Measures

Trauma History was evaluated using the *Trauma History Questionnaire* (THQ; Green, 1996; Hooper, Stockton, Krupnick, & Green, 2011). The THQ evaluates trauma events in 3 areas: crime-related events, unwanted physical trauma, and sexual experiences. A total score was tabulated for use in examining the overall number of traumatic events in participants' lifetime.

Number of Days Incarcerated in the 90 days prior to this index incarceration was assessed using the Timeline Followback (TLFB; Sobell, Sobell, Litten, & Allen, 1992). These data were used to examine the total number of days incarcerated, as well as to control for days of exposure (i.e., days incarcerated were not days when participants could trade sex for drugs or money).

Alcohol Use was assessed using the Structured Clinical Interview (SCID) for alcohol symptoms (SCID; (Spitzer, Williams, Gibbon, & First, 1990; Williams, Gibbon, First, & Spitzer, 1992). SCID items were used to evaluate alcohol abuse and dependence disorders in accordance with the DSM-IV. A score of total number of criteria endorsed was tabulated.

Other Substance Use in the 30 days preceding the baseline interview was collected via the drug history 30-day (versus lifetime) module of the *Addiction Severity Index* (McLellan, Kushner, Metzger, & Peters, 1992). Participants were asked whether they had used the following substances in the 30 days prior to this current episode of incarceration: heroin/ other opiates/painkillers/methadone, sedatives/benzodiazepines, cocaine, and marijuana. Any use during the prior 30 days was coded as positive for use.

Relational, Behavioral, and Emotionally Normative Components Measures

General Social Support was evaluated using a 4-item subscale from the Medical Outcomes Study (Sherbourne & Stewart, 1991) of tangible social support. Items explored whether participants had access to help in circumstances where they might be unable to care for

themselves. Items were scored on a scale ranging from (0) none of the time to (4) all of the time, and a total score was tabulated for each participant by computing the mean of the responses.

Support for Alcohol Abstinence—Information about peer support for substance use or sobriety was collected with items adapted from the Important People and Activities Instrument (IPA; Clifford & Longabaugh, 1991). Items asked about the number of people the participant spent time with who supported sobriety and abstinence from alcohol use, and how many supported continued alcohol use. These items were coded to produce a continuous measure, based on the number of people participants reported who encouraged their drinking; higher scores reflect greater support for alcohol abstinence.

Partner Drug Use was assessed using a single item (yes/no) question asking whether participants lived with a partner "who had a drug problem."

Statistical Analysis

We reported means, counts, and percentages to describe the background characteristics of the sample (see Table 1). Pearson's χ^2 tests and *t*-tests were used to test for differences in means or percentages between women who endorsed sex trading at baseline and those who did not.

Using the theoretical framework of the Theory of Gender and Power, predictors were organized into three categories: (1) sexual division of labor, (2) sexual division of power, and (3) relational, behavioral, and emotionally normative components. Separate models were estimated for each theoretically defined set of predictors, and for demographic characteristics. A final model was estimated using variables from each domain that were significant predictors of involvement in sex trading. For each model we report the logit coefficient, the OR, and the 95% confidence interval for the OR. The Nagelkerke pseudo R^2 statistic (also known as the Cragg and Uhler R^2) is also reported as a measure of improvement in fit relative to a null (constant only) model.

Results

Participants

Seventy women (28.6%) endorsed having engaged in trading sex for drugs or money in the 3 months prior to the baseline interview. The full sample was predominantly non-Hispanic White (71.4%), with an average age of 34.1(± 8.9) years. The mean educational attainment was 10.4 (± 1.6) years, and almost 30% of the sample reported having received special education services. On average, women endorsed over 7 of the SCID alcohol criteria, and reported considerable recent use of other drugs; 42.5% reported recent opiate use, 67.8% reported recent cocaine use, 28.6% reported recent benzodiazepine use, and 56.3% reported recent cannabis use.

Almost a third (31.4%) of the women described living with a partner who had a drug problem. More than 20% of the women lived with a child under the age of 14 years, and almost half (44.9%) had a history of having been in foster care. Of the 357 charges listed by

the ACI for the 245 women in this study, 10.9% (N=39) of the individual charges were related to sex trade including loitering and prostitution. Descriptive statistics for other variables used in the analysis are also reported in Table 1.

Bivariate Comparisons of Women Who Engaged in Sex Trading versus those Who Did Not

At baseline, significant differences between women who did and did not engage in sex trading were found on a number of study variables (see Table 1). Women who engaged in sex trading were less likely to be living with children under the age of 14 years ($\chi 2 = 10.35$, $p < .01$), endorsed more traumatic events ($t = -2.77$, $p < .01$), had significantly more days incarcerated in the past 90 days ($t = -2.80$, $p < .01$), and met a greater number of alcohol abuse disorder SCID criteria ($t = -4.33$, $p < .01$). They were also more likely to have recently used opiates/methadone ($\chi 2 = 4.63$, $p < .05$), benzodiazepines ($\chi 2 = 7.94$, $p < .01$), and cocaine ($\chi 2 = 31.57$, $p < .01$), and had significantly ($t = -3.78$, $p < .01$) lower support for alcohol abstinence. Between group differences on other background characteristics described in Table 1 did not differ significantly.

Concurrent Predictors of Sex Trading

The associations between sex trading and age or ethnicity were substantively small and were not statistically significant (Model I Table 2); these variables were not included in subsequent models.

In Model II, reflecting predictors of sexual division of labor, the estimated odds of sex trading was significantly lower among persons living with a child under the age of 14 (OR = 0.25, 95%CI 0.20; 0.61, p = .002); other predictors included to represent sexual division of labor were not associated significantly with involvement in sex trading.

Among variables included to represent the sexual division of power (Model III) number of days incarcerated (OR = 1.06; 95%CI 1.03; 1.10, $p < .001$), number of alcohol abuse disorder criteria met (OR = 1.13, 95%CI 1.02; 1.25), and recent use of cocaine (OR = 9.58, 95%CI 4.20; 21.8, $p < .001$) were associated with a higher likelihood of involvement in sex trading. The Nagelkerke R^2 suggests that variables representing sexual division of power are the strongest predictors of sex trading.

Only support for alcohol abstinence (OR = 0.72; 95%CI 0.58; 0.88, p = .002) was associated significantly with sex trading in Model IV, which included variables intended to reflect relations, behavioral, and emotionally normative components.

In the composite multivariate model (Model V) which included statistically significant predictors from Models I-IV, the likelihood of sex trading was positively and significantly associated with number of days recently incarcerated (OR = 1.06, 95%CI 1.01; 1.11, p = .015) and recent cocaine use (OR = 10.3, 95%CI 3.31; 31.8, $p < .001$), and inversely associated with support for alcohol abstinence (OR = 0.77, 95%CI = 0.62; 0.97, p = .025). Living with a child under 14 and number of alcohol disorder criteria met were not significant predictors of sex trading when controlling for other variables included in the model.

Discussion

While previous research has evaluated correlates of sex trade involvement (e.g. El-Bassel et al., 2001; Gilchrist et al., 2005; Golder & Logan, 2007; Gossop et al., 1994; Green, Goldberg, Christie, & Frischer, 1993; Roe-Sepowitz et al., 2011), to date, none have focused on jailed women with alcohol problems. We note, however, that while hazardous drinking represented a central eligibility requirement, the vast majority of women reported both significant alcohol and illicit substance use. We examined sex trading in the context of incarceration, in this case jail, in light of the high risk for criminal justice system involvement of alcoholic women who engage in sex trading. Alcohol and illicit substance use are prevalent among sex traders (Li, Li, & Stanton, 2010a) and sex traders are highly likely to move through the criminal system (El-Bassel et al., 2001; Golder & Logan, 2007). Heavy substance use further facilitates involvement in sex trading through its use as a coping strategy for ongoing commercial sex work (Li et al., 2010b). Taking these risk factors together, it is important to develop an understanding of multiple factors that are uniquely and jointly associated with sex trading among this population. Following the framework of the Theory of Gender and Power, we constructed three theoretically guided models to examine factors associated with recent sex trading at the time incarceration (1) sexual division of labor, (2) sexual division of power, and (3) relational, relational, behavioral, and emotionally normative factors.

Sexual Division of Labor

We hypothesized that having young children in the home would increase involvement in sex trading. However, results from the sexual division of labor model suggest that having a child under 14 living at home was associated with a *decreased* likelihood of engagement in sex trading. Previous findings of no differences in engagement in sex trading between those with and without minor children were found in one other study (El-Bassel et al., 2001), although children were defined as under 18 (versus under 14) and it was not specified whether children were living together with participants. It may be that living together with younger children makes involvement in sex trading more challenging as having young children contributes to a lifestyle that is inconsistent with sex trading (i.e., pressures to be available at home for children and pressures to be a positive role model are inherent in parenting young children). Furthermore, as suggested by a previous study (Dalla, 2006), it may be that parenting responsibilities motivate efforts to exit sex trading.

It is notable that other hypothesized sexual division of labor predictors, including level of education, special education, and a history of foster care were not significant predictors of involvement in sex trading. Our findings are inconsistent with at least one prior study, which found that women who engaged in sex trading reported fewer years of education (average of 11.2 years) than women who did not (average of 11.8 years) (El-Bassel et al., 2001). Of note, the difference detected in this previous study, though significant, was not substantively large. In addition, our study is the first to specifically examine special education, in particular, as a predictor, and our results indicated it is not significantly associated with involvement in sex trading. Finally, prior research has documented that having been in foster care is associated with a significantly higher need for psychiatric treatment for women

engaged in sex trading (Gilchrist et al., 2005), but has not demonstrated a role in increasing likelihood of engagement in sex trading, in and of itself. Therefore, while foster care may be associated with increased mental distress, it may not be an important predisposing factor for being involved in sex trading among incarcerated women. Overall, among the variables in the sexual division of labor domain, only living with a child under the age of 14 remained significantly associated with involvement in sex trading among incarcerated women who drink hazardously. This finding highlights the important role that parenthood may have on involvement in sex trading.

Sexual Division of Power

In the model of the sexual division of power, we found a greater likelihood of cocaine use and alcohol use among women who engaged in sex trading. Those who reported recent cocaine use were almost 10 times more likely to report engagement in sex trading. This finding is consistent with numerous previous studies that have demonstrated high rates of various forms of substance use (Logan & Leukfeld, 2000; Green et al., 1993; Schilling et al., 1994; Gossop et al., 1994; Plant, Plant, Peck, & Setters, 1989), and cocaine use, in particular (e.g., El-Bassel et al., 2001; Gilchrist et al., 2005; Golder & Logan, 2007; Surratt & Inciardi, 2004), among women involved in sex trading. In addition, for each additional SCID criteria for alcohol use disorder endorsed, women were almost 2.5 times more likely to have been engaged in sex trading. This finding reflects previous research supporting the link between alcohol use and involvement in sex trading (e.g. Li et al., 2010a).

Total number of traumatic events was not significantly associated with likelihood of engagement in sex trading in the current study. This null finding is notable given that previous research has documented a significant association between interpersonal trauma, particularly physical and sexual violence (e.g., Gilchrist et al., 2005; Golder & Logan, 2007) and likelihood of transactional sex. In particular, previous research has highlighted the importance of childhood trauma in entry into sex trading (e.g., McClanahan et al., 1999). Perhaps no differences could be found because traumatic events are so common in the lives of incarcerated women (Abrams, Etkind, Burke, & Cram, 2008; Komarovskaya, 2009; Kubiak, Kim, Fedock, & Bybee, 2013; Zust, 2009; i.e., 98% of our sample reported past trauma events).

With regard to days incarcerated in the 90 days prior to the index incarceration, this is the first study, to our knowledge, that has examined number of days incarcerated as a predictor of sex trading. We found that individuals who were engaged in sex trading were likely to report a greater number of days incarcerated in the 90 days prior to their current incarceration period. In previous studies, women who engaged in sex trading were significantly more likely to have been incarcerated in the past year (El-Bassel et al., 2001; Golder & Logan, 2007). Adding to previous research documenting that evidence of a recent incarceration period is associated with greater likelihood of involvement in sex trading, the current study suggests that *amount* (i.e., number of days) of recent incarceration is associated with involvement in sex trading.

Overall, both recent use of cocaine and greater number of days of recent incarceration were significantly associated with involvement in sex trading. These findings underscore the

importance of both institutional factors (i.e., incarceration) and intrapersonal behavioral factors (i.e., addiction) that impact one's ability to exert power in their own choices on involvement in sex trading.

Relational, Behavioral, and Emotionally Normative Components

In the model reflecting relational, behavioral, and emotionally normative predictors, more support for alcohol abstinence was associated with reduced likelihood of engagement in sex trading. Previous evidence in the literature has established that alcohol use is an important correlate of sex trading (e.g., El-Bassel et al., 2001; Golder & Logan, 2007), highlighting problematic alcohol use as an important target of intervention. Indeed, the social networks of women who engage in sex trading have more substance use (Li et al., 2010a), including having and living with partners with drug or alcohol problems (Witte, El-Bassel, Wada, Gray, & Wallace, 1999). Social networks of women involved in sex trading, including the clients of women engaged in sex trading, also use alcohol, making it a norm of transactional sex (e.g., VanLandignham & Trujillo, 2002). The consistent finding of drug and alcohol problems among individuals involved in sex trading suggests clearly that treatments that are tailored to assist this population should focus on substance-related interventions, and that interventions should particularly target social support networks to increase the number of sober supports to which women have access.

Full Model

In addition to substance use and support for alcohol abstinence, the number of days incarcerated in the 90 days prior to the index incarceration remained a significant predictor of sex trading in the final model. At least two studies have found that recent incidence of incarceration was a significant predictor of sex trading using bivariate analyses (El-Bassel et al., 2001; Golder & Logan, 2007). However, in developing a multivariate model (Golder & Logan, 2007), the occurrence of incarceration did not remain a significant predictor of sex trading. In contrast, examination of incarceration as a continuous variable (i.e, number of days incarcerated in the 90 day period prior to incarceration) in the current study yielded a significant finding. This finding suggests that the amount of recent incarceration is important to consider in understanding the likelihood of engagement in sex trading. Although it is beyond the scope of this study, it may be that individuals who engage in sex trading are more likely to be incarcerated more often, or are more likely to face harsher sentences because the nature of their charges are more serious. These hypotheses warrant further investigation.

Although not the direct focus of the study, it is notable that whereas nearly 30% of the women endorsed any sex trading in the 90 days prior to incarceration, only about 10% of charges were directly related to sex trading (i.e., prostitution and loitering). Thus in our sample, criminal charges were not sensitive screens for identifying women who have recently engaged in sex trading.

The use of the theoretical framework of the Theory of Gender and Power to examine factors associated with involvement in sex trading among hazardously drinking jail detainees offers some valuable insights about this high-risk population. Indeed, factors from the three unique

domains (i.e., sexual division of labor, sexual division of power, and relationship, behavioral, and emotionally normative components) were significant in predicting likelihood of baseline involvement in sex trading. The unique components from the three model domains therefore help to enhance understanding of factors contributing to involvement in sex trading, and support the utility of using a theoretical framework that accounts for gender- and power-based inequities present among this population.

Limitations

Several important limitations of this study should be noted. First, women who traded sex for money and women who traded drugs were collapsed into the same group in the current study. While previous studies have similarly collapsed these groups (El-Bassel et al., 2001), others have suggested that risky sex may vary by whether women are trading sex for drugs, for money, or for both (e.g., Golder & Logan, 2007; Semple, Strathdee, Zians, & Patterson, 2011). Similarly, the current study did not account for different types of sex trade that may have been included (i.e., street level versus other). Sex trading is a diverse business, and the various types of sex trading have important differences in lifestyle and risk, suggesting the importance of examining these differences more closely than was possible in the current study. As this was a secondary analysis, detailed information about the amount or nature of sex trading participation was not available (e.g., number of customers per night, venue, etc.), which would be useful to examine in future studies. Other variables that would be useful to evaluate include income and employment, which were not available in our dataset. We recommend these variables be evaluated in future research utilizing the Theory of Gender and Power as a guiding theoretical framework. Further, analysis of the nature of charges for women involved in sex trading was beyond the scope of the current study, but remains an important area for future research. In addition, a sample size large enough to detect interaction effects was not available in this study, but interactions between substance use and variables including trauma and sobriety support will be an important area for future inquiry. Finally, the study was limited to hazardously drinking women and our findings may not extend to incarcerated women who do not drink hazardously.

Conclusions

Our findings suggest that continued sex trading may be viewed as the result of drug and alcohol dependency combined with a lack of social, and perhaps instrumental, support for making changes among these jail detainees. Said differently, it seems that women's network characteristics may be a powerful factor influencing not only substance use, but also continued involvement in sex trading. This finding highlights the need to develop treatment approaches that offer a combination of strategies to support changes in substance use and provide a means to developing a social support network consistent with sobriety. Twelve step programs provide a new social network that supports sobriety (Kaskutas, Bond, & Humphreys, 2002). Developing ways to facilitate 12-step program involvement during and after incarceration may be a powerful intervention to approach for jailed, hazardously drinking and substance abusing women involved in sex trading. In addition to twelve step programs, strong empirical evidence for a number of other programs tailored to women's needs may also provide treatment options for incarcerated women who are involved in sex

trading. Such programs include Helping Women Recover (Covington, 2008), Dialectal Behavior Therapy (Linehan, 1993), and Seeking Safety (Najavits, 2002).

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Table 1

Demographic and Background Characteristics of the Sample by Sex Trade Involvement

	Mean (± SD) or n (%)				
			SEX WORK		
	Range	**Cohort (n = 245)**	**No (n = 175)**	**Yes (n = 70)**	**t or χ^2**
Age (Years)	18-56	34.1 (± 88.9)	34.0 (± 88.1)	34.3 (± 88.3)	−0.25
Non-Hispanic Caucasian	0-1	175 (71.4%)	126 (72.0%)	49 (70.0%)	0.10
Education (Years)	6-12	10.4 (± 1.6)	10.4 (± 1.6)	10.3 (± 1.7)	0.53
Special Education (Yes)	0-1	72 (29.4%)	50 (28.6%)	50 (28.6%)	0.20
Lives w Child < 14 Years (Yes)	0-1	54 (22.0%)	48 (27.4%)	6 (8.6%)	10.35**
Any Foster Care (Yes)	0-1	110 (44.9%)	77 (44.0%)	33 (47.1%)	0.20
Trauma History	0-21	9.20 (± 4.91)	8.62 (± 4.71)	10.5 (± 5.16)	−2.77**
Recent Incarceration (past 90 days)	0-59	2.22 (± 7.30)	1.41 (± 5.10)	4.26 (± 10.81)	−2.80**
Alcohol Use	0-11	7.46 (± 2.96)	6.97 (± 2.98)	8.69 (± 2.55)	−4.23**
Any Opiods/Methadone (Yes)	0-1	110 (42.5%)	71 (40.6%)	39 (55.7%)	4.63*
Any Benzodiazepines (Yes)	0-1	70 (28.6%)	41 (23.4%)	29 (41.4%)	7.94**
Any Cocaine Use (Yes)	0-1	166 (67.8%)	100 (57.1%)	66 (94.3%)	31.57**
Any Cannabis Use (Yes)	0-1	138 (56.3%)	98 (56.0%)	40 (57.15)	0.03
General Social Support	0-16	10.9 (± 5.07)	11.3 (± 4.92)	10.1 (± 5.4)	1.76
Support for Alcohol Abstinence	0-9	1.76 (± 1.44)	1.55 (± 1.38)	2.30 (± 1.47)	−3.78**
Partner Drug Problem (Yes)	0-1	77 (31.4%)	52 (29.7%)	25 (35.7%)	0.84

*p < .05

**p < .01

Table 2

Logistic Regression Models Predicting the Baseline Likelihood of Involvement in Sex Trading (n = 245)

	b	z (p =)	OR (95%CI)
MODEL I: Demographics			
Age	−0.00	−0.25 (.803)	1.00 (0.97; 1.04)
Non-Hispanic Caucasian	−0.10	−0.31 (.757)	0.90 (0.49; 1.67)
Model LR^2 = 0.16, df=2, p = .923; Nagelkerke R^2 = .00			
MODEL II: Sexual Division of Labor			
Education (Years)	0.00	0.02 (.981)	1.00 (0.83; 1.20)
Special Education (Yes)	0.16	0.49 (.490)	1.17 (0.62; 2.21)
Lives w Child < 14 Years (Yes)	−1.40	−3.03 (.002)	.25 (0.10; 0.61)
Any Foster Care (Yes)	0.09	0.32 (.750)	1.10 (0.61; 1.97)
Model LR^2 = 12.26, df=4 p = .016; Nagelkerke R^2 = .07			
MODEL III: Sexual Division of Power			
Trauma History	0.02	0.82 (.411)	1.02 (0.97; 1.07)
Recent Incarceration (past 90 days)	0.06	3.49 (<.001)	1.06 (1.03; 1.10)
Alcohol Use	0.12	2.45 (.014)	1.13 (1.02; 1.25)
Any Opioids/Methadone (Yes)	−0.42	−1.49 (.136)	0.66 (0.38; 1.14)
Any Benzodiazepine Use (Yes)	0.54	1.91 (.056)	1.72 (0.99; 2.99)
Any Cocaine Use (Yes)	2.26	5.38 (<.001)	9.58 (4.20; 21.8)
Any Cannabis Use (Yes)	0.27	1.11 (.267)	1.31 (0.81; 2.12)
Model LR^2 = 92.44, df=7 p < .001; Nagelkerke R^2 = .28			
MODEL IV: Relational, Behavioral, and Emotionally Normative Components			
General Social Support	−0.03	−1.43 (.154)	0.97 (0.93; 1.01)
Support for Alcohol Abstinence	−0.34	−3.10 (.002)	0.72 (0.58; 0.88)
Partner Drug Problem	0.23	0.97 (.330)	1.26 (0.79; 2.00)
Model LR^2 = 25.64, df=3 p < .001; Nagelkerke R^2 = .08			
MODEL V: Composite Multivariate Prediction Model			
Lives w Child < 14 Years (Yes)	−0.64	−1.26 (.206)	.53 (0.20; 1.42)
Recent Incarceration (past 90 days)	0.06	2.44 (.015)	1.06 (1.01; 1.11)

MODEL I: Demographics	b	z (p =)	OR (95%CI)
Alcohol Use	0.09	1.37 (.169)	1.10 (0.96; 1.25)
Any Cocaine Use (Yes)	2.33	4.03 (<.001)	10.3 (3.31; 31.8)
Support for Alcohol Abstinence	−0.26	2.24 (.025)	0.77 (0.62; 0.97)
Model $LR^2 = 59.39$, $df=5$ $p < .001$; *Nagelkerke* $R^2 = .31$			