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Men (and Women) as “Sellers” of Sex in Alcohol-Serving Venues in Cape Town, South Africa

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Abstract

Background—The relationship between transactional sex, HIV risk, and partner violence has been well documented in South Africa, but research has focused primarily on women and has not been conducted in high-risk social contexts. The aim of this study was to examine associations between transactional sex and HIV risk among women and men in alcohol-serving venues in Cape Town, South Africa.

Methods—We surveyed 1,989 women and 2,468 men attending alcohol-serving venues in Cape Town, South Africa to assess transactional sex behavior (i.e., receiving money or goods in exchange for sex), alcohol and drug use, history of childhood abuse, current relationship violence, and sexual risk behaviors.

Results—Among both women and men, trading sex was related to higher alcohol use, greater likelihood of drug use, substance use in sexual contexts, and a greater likelihood of experiencing physical and sexual violence. Compared to other women, women who traded sex reported a greater proportion of condom-unprotected sex; this relationship was not found for men. Analyses showed that men were almost twice as more likely to report trading sex for items, including money or alcohol, than women (9.7% vs. 5.8%). Overall, men who traded sex were similar to their female counterparts.

Conclusions—Similar associations between trading sex and different risk behaviors were found among women and men with limited economic means and substance use problems. Future research should more closely study transactional sex in high-risk venues as it relates to violence and should examine men who trade sex as a potential bridge population between heterosexual women and men who have sex with men.

Keywords

Transactional sex; alcohol; substance use; gender-based violence; HIV risk; sexual risk

South Africa bears the greatest burden of HIV of any country in the world, with an estimated 5.6 million people living with HIV or AIDS (UNAIDS, 2009). HIV prevalence in South Africa differs by gender, with an estimated prevalence rate of 20% among women and 12% among men aged 15–49 years old (Shisana, Rehle, Simbayi, & Mbelle, 2008). Furthermore, South Africa has among the highest rates of hazardous drinking among women and men who consume alcohol. About 25% of adult males and 10% of adult females who drink experience alcohol problems in this country (Parry, 2005). Although gender-power imbalances largely influence separate experiences for women and men, their shared structural environment and circumstances, including limited economic opportunity and alcohol dependence, may influence similar risk behaviors. These behaviors include transactional sex, or the exchange of sex for money, material goods, including alcohol and drugs, or services. Transactional sex appears to play a significant role in the heterosexual HIV epidemic of South Africa (Dunkle et al., 2004a). However, women who sell or trade sex have been the primary focus of research on this topic, whereas men who trade sex have been largely neglected. Research examining transactional sex behavior among women and men, particularly in high-risk contexts, is needed.

Perhaps more than any other social context in South Africa, alcohol-serving venues are sites that confer exceptionally high risks for HIV transmission. Household surveys in South Africa have found that individuals who consume alcohol report heavy amounts of drinking, with rates of hazardous drinking among the highest in the world (Parry, 2005). Alcohol use is a robust predictor of sexual risk in Sub-Saharan Africa (Kalichman, Simbayi, Kaufman, Cain, & Jooste, 2007). In addition to patterns of alcohol consumption, alcohol-serving venues are often places where sex partners meet. Research by Weir and colleagues on sexual networks has shown that 94% of places where South Africans report meeting new sex partners are alcohol-serving venues (Weir et al., 2003). Thus, these venues serve as intersections of high risk related to both substance use and sex behavior. Particularly problematic is the exchange of sex for alcohol and/or drugs in this context. In alcohol-serving venues in Cape Town, alcohol has been shown to be a currency for sexual exchange (Townsend et al., 2011; Watt et al., 2012)

Whereas research has shown that women exchange sex for survival (Wamoyi, Wight, Plummer, Mshana, & Ross, 2010), social status (Leclerc-Madlala, 2003), and for alcohol and/or drugs (Townsend et al., 2011; Watt et al., 2012; Morojele et al., 2006; Mataure et al., 2002), trading sex is not limited to women. Individuals who are alcohol dependent are more likely than those without alcohol problems to have sex within transactional relationships, regardless of gender (Kalichman, Simbayi, Vermaak, Jooste, & Cain, 2008). Although men engaged in transactional sex are more likely to be “buyers,” men do trade sex to get money or access to goods. One study on a sample of sugar plantation residents in Tanzania showed that 16% of the men were trading sex in exchange for something, including money, food, and alcohol (Norris, Kitali, & Worby, 2009). In turn, trading sex was associated with higher rates of sexually transmitted infection for both women and men.

Individuals who trade sex are also at an increased risk for experiencing violence, particularly among women (Carlson et al., 2012; Wahab, 2005). In the course of sexual exchange, women are more likely to experience physical and sexual violence from a sex partner. In

fact, Wahab (2005) reported that from half to all women who engage in sex work have experienced some form of gender-based violence. Experience of violence appears to be prevalent not only among women who participate in formal commercial sex work, but also among women who engage in less formal transactional sex (Watt et al., 2012). The evidence suggests that these women may be even more likely than commercial sex workers to experience violence, given the lack of legal protection and control over the terms of sexual exchange (Blankenship & Koester, 2002; Rekart, 2005). Men who trade sex are exposed to similar vulnerabilities in the course of sexual exchange, although this work is limited to men who engage in formal sex work (Minichiello et al., 1999; Scott et al., 2005). Finally, research shows that both women and men who have experienced abuse during childhood are more likely to engage in sex trade (Braitstein et al., 2006; Kim, Johnson, Goswami, & Puisis, 2011; Stoltz et al., 2007). Given that apart from sexual exchange alone, experiencing abuse has been indirectly and directly linked to higher risk of HIV infection, the psychosocial factors surrounding transactional sex help to compound a great deal of risk (Dunkle et al., 2004b; Jewkes, Dunkle, Nduna, & Shai, 2010; Maman, Campbell, Sweat, & Gielen, 2000; Pitpitan et al., 2012).

In the current study, we examined whether trading sex was associated with alcohol and drug use, exposure to violence, and sexual risk behavior among both women and men who were recruited from alcohol-serving venues in Cape Town, South Africa. Given the significance and prevalence of drinking in South Africa, we sought to capture a more comprehensive understanding of alcohol use and its relationship with transaction sex. Therefore, we examined multiple dimensions of drinking including alcohol expectancies, use (e.g., frequency), and severity (e.g., problem drinking). We hypothesized that women and men who have recently exchanged sex for money or goods would report higher alcohol and drug use and would be more likely to report both experiencing violence from a sex partner and a history of childhood abuse. Although we expected women and men who trade sex to exhibit similar patterns of risk behavior (e.g., alcohol and drug use during sex), we expected that only among women would there be an association between transactional sex and condom unprotected sex. This is because women's protection is dependent on men's use of condoms (Kalichman, Williams, Cherry, Belcher, & Nachimson, 1998; Mittal, Senn, & Carey, 2011; Welch Cline, Johnson, & Freeman, 1992) and in sexual exchange relationships, women may be unable to dictate or negotiate safe sexual practices.

Method

Participants and Setting

Participants were men and women attending alcohol-serving venues in a peri-urban township in Cape Town, South Africa. The township is located within 20 kilometers of Cape Town's central business district and consists of both people of mixed race (i.e., Coloureds) and Black Africans. A relatively new township, the community was established in 1990 and is one of the first townships in South Africa to racially integrate. Large numbers of indigenous Black Africans started settling in and around the township during the 1990's after government policies of racial segregation during Apartheid ended.

Venue Selection

Using an adaptation of the Priorities for Local AIDS Control Efforts (PLACE) community mapping methodology (Weir, Morroni, Coetzee, Spencer, & Boerma, 2002), we located and defined alcohol-serving establishments in the township for the current study. Alcohol-serving venues were systematically identified by approaching a total of 509 members of the community at public places such as bus stands and markets, and asking them to identify places where people go to drink alcohol. Venues were eligible if they had space for patrons to sit and drink, reported >50 unique patrons per week, had >10% female patrons, and were willing to have the research team visit periodically over the course of a year.

Procedure

Surveys were conducted by field workers between October 2009 and May 2012 at a total of twelve alcohol-serving venues. The fieldwork team included six South Africans (two Black African women, one Black African man, two Coloured women, and one Coloured man). All six had some post-secondary school training. Field workers were matched to the venues by race and language. Black African field workers spoke Xhosa and English, and Coloured field workers spoke Afrikaans and English. Field staff visited each of the twelve venues to administer surveys to patrons a total of four times over the course of the study. Individual field workers approached venue patrons after they had entered the venue but before they were intoxicated. Participants were invited to complete the 9-page survey questionnaire, which took on average 10–15 minutes to complete. Verbal consent was obtained. Participants were ensured privacy by being given a semi-private place to sit and complete the survey in the venue. Surveys were administered in participants' preferred language (Xhosa, Afrikaans or English). When assistance was required (<5%), participants were read the survey questions and responded on their own survey forms. Participants were given a small token of appreciation for completing surveys, such as a keychain or coffee mug. A question on the survey asked whether the participants had taken the survey previously, but no identifiers linked the surveys over time. All study procedures were approved by the ethical review boards in the U.S. and South Africa.

Measures

Measures were adapted from previous research conducted in South Africa and were administered in the three languages spoken throughout the township; English, Xhosa and Afrikaans. All of the measures were translated and back-translated to produce parallel forms. We used a four-month recall period for many of our assessments because previous research suggests that this period provides optimal recall for drug-use and sex behaviors (Napper, Fisher, Reynolds, & Johnson, 2010).

Demographics—Participants were asked to report age, education, gender, ethnicity, employment, marital status, having children, whether they or their partner was pregnant, having electricity and having indoor running water. The last two were used as proxy measures of socioeconomic status.

Transactional Sex—To assess engagement in transactional sex, we constructed a single item to administer to both men and women. Participants were asked “Has someone given

you money, alcohol, drugs or a place to stay in exchange for sex in the past 4 months?” and responded either “yes” or “no”.

Substance Use

Alcohol expectancies: We assessed alcohol-sex outcome expectancies with four statements adapted from Goldman and Darkes (Goldman & Darkes, 2004). Participants responded yes or no to the following: “Drinking alcohol makes me more relaxed;” “Drinking alcohol makes me feel less in control of myself;” “After drinking alcohol I am less likely to use a condom;” and “Sex is better after I have been drinking.” Current frequency and quantity of alcohol use were assessed with the first three items on the Alcohol Use Disorder Identification Test (AUDIT; Saunders, Aasland, Babor, De la Fuente, & Grant, 1993). These items assess quantity and frequency of alcohol consumption, and have been shown to be as reliable and valid as the full-length 10-item scale (Meneses-Gaya et al., 2010). The three alcohol consumption items were:

Alcohol frequency: Participants were asked to report how often they have a drink containing alcohol; responses ranged from 1 being “never” to 5 being “more than 4 times a week”.

Alcohol quantity: Participants reported how many drinks containing alcohol they have on a typical day when they are drinking; responses ranged from 1 being “I don't drink” to 6 being “10 or more”.

Binge drinking frequency: Participants reported how often they have six or more drinks in a single occasion; responses ranged from 1 being “never” to 5 being “daily or almost daily”.

Problem drinking: Participants were asked to respond to the four-item CAGE questionnaire (Ewing, 1984). This scale is specifically designed to screen for alcohol abuse and dependence. The specific items, with yes/no responses, were: “Have you ever felt that you should cut down on your drinking?” “Have people annoyed you by criticizing your drinking?” “Have you ever felt bad or guilty about your drinking?” and “Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?” Participants were coded as problem drinkers if they responded “yes” to at least two items.

Current drinking: Participants were asked if they planned on drinking at the bar that evening and responded yes or no.

Drug use: In separate items, participants were asked to report how often they used four different drugs in the past four months: “marijuana (dagga),” “glue, petrol or sprits,” “methamphetamine (tik),” and “injected a drug with a needle” with responses as “never,” “a few times,” “weekly,” and “daily.” Because data on the drug use items were positively skewed (i.e., relatively low numbers of individuals reporting more frequent drug use), responses were collapsed and coded as 0 (no drug use) and 1 (any drug use).

Exposure to Violence—Participants reported whether they experienced physical and/or sexual abuse as a child, and whether they experienced physical and/or sexual abuse from or

directed towards a sex partner in the last four months. Specifically, they responded yes/no to the following items:

Childhood abuse: “As a child, were you badly beaten up by your parents or the people who raised you?;” and “As a child, were you ever sexually abused?”

Gender-based violence: “Have you been hit by a sex partner in the last four months?;” “Have you hit a sex partner in the last four months?;” “Has someone forced you to have sex in the last four months?;” and “Have you forced someone to have sex in the last four months?;”.

Sexual Risk—Sexual risk was conceptualized in terms of sexual risk behaviors and sexually transmitted infection risk history.

Sexual risk behaviors: Participants used an open-response format to report the number of the following acts during the past four months: male sexual partners, female sexual partners (summed number of male and female sexual partners to index “total partners”), times of unprotected vaginal sex (i.e., without condoms), times protected vaginal sex, times unprotected anal sex, times protected anal sex, times drank alcohol before sex, and times used drugs before sex. We used an open-response format to avoid anchored responses that can result from use of closed-ended formats.³³ We created a variable “percent unprotected sex” by dividing total number of condom unprotected vaginal and anal acts (summed) by total protected and unprotected vaginal and anal acts (summed). For this variable, participants who reported zero male or female sex partners or zero unprotected acts in the last 4 months were coded as 0% unprotected. Participants were also asked to respond “yes” or “no” to two items regarding their sexual behavior at the bar. Specifically, they reported whether they ever met a new sex partner at the bar and whether they ever had sex on the premises of the bar.

Recent sexually transmitted infection: Participants were asked to report whether they have been diagnosed with a sexually transmitted infection in the last four months.

HIV lifetime testing and status: Participants were asked to respond yes/no to the following item, “Have you ever been tested for HIV?” Immediately following they were asked, “What was the result of your most recent HIV test?” Response choices were, “HIV positive,” “HIV negative,” “Don’t know,” and “Refuse to answer.”

Data Analyses

Surveys were data scanned and manual checks were performed to identify scanning errors. The data was then cleaned to create a dataset of unique individuals that had data on the key variables of interest. A total of 6,380 individuals were approached to participate, and 5,997 (94%) agreed. Of these participants, 1,427 (23.8%) had previously completed a survey on a prior occasion or did not report whether they had completed a survey on a prior occasion. These responses (n=1427), as well as missing data on recent transactional sex (n=109) and gender (n=4) were removed leaving 1,989 women and 2,468 men in all analyses.

Analyses were performed in four stages. First, we conducted descriptive analyses of transactional sex by demographic characteristics, separately by gender. Second, we used logistic regression to examine differences between individuals who reported transactional sex in the past four months (=1) to those who did not (=0), separated by gender and adjusting for demographic differences. Results are reported as adjusted odds ratios with 95% confidence intervals. Third, variables that were independently associated with transactional sex in bivariate analyses ($p < .10$) were included in a multivariate logistic regression model predicting transactional sex behavior. Models were examined separately for men and women and controlled for relevant demographic variables. Finally, we examined differences between women who sold sex and men who sold sex using chi-squared difference tests for categorical variables and t-tests for continuous variables.

Results

Descriptives

In our sample of 1,989 individuals, 116 women (5.8%) and 240 men (9.7%) reported that they had recently engaged in transactional sex (i.e., been given money, alcohol, drugs or a place to stay in exchange for sex). We examined demographic differences between those who reported transactional sex behavior and those who did not (Table 1). For both women and men, those who were younger, childless, pregnant (or partner pregnant), and did not have electricity or indoor water were more likely to trade sex. Women who were married were less likely to trade sex. Men who were less educated were also more likely to trade sex than men with more education. Finally, Black women were more likely to trade sex compared to Coloured women. We controlled for these demographic differences in all further analyses.

Substance use

Table 2 shows substance use among those who have and have not recently traded sex separated by gender. For alcohol expectancies, we found that compared to women who did not recently trade sex, those women who did were more likely to report that alcohol makes them feel more relaxed (66% vs. 53%). They were also twice as likely to report that they are less inclined to use a condom after drinking (47% vs. 23%) and twice as likely to report that sex is better after drinking (34% vs. 16%). The same patterns were found for men, and in addition men who traded sex were more likely to report less self-control after drinking compared to their non-trading male counterparts (38% vs. 27%). In terms of alcohol quantity and frequency, women who traded sex were more likely to report more frequent and higher alcohol use and more frequent binge drinking. For example, compared to those women who have not recently traded sex, those women who have were more likely to report consuming alcohol more than four times a week (23% vs. 10%) and to have at least ten drinks in a single drinking episode (23% vs. 15%). Women who recently traded sex were also more likely than other women to have drinking problems (78% vs. 63%) and to report that they came to the bar that day/night to drink (78% vs. 65%). Men who traded sex reported more frequent drinking in general, and more frequent binge drinking compared to other men. However, they did not differ from other men on alcohol quantity, problem drinking, or current drinking. Trading sex was associated with recent drug use for both women and men.

Women who traded sex were more likely to report marijuana use (26% vs. 11%), sniffing drugs (16% vs. 2%), meth use (22% vs. 5%), and injection drug use (14% vs. 1%) compared to other women. Men also reported the same patterns for sniffers (18% vs. 4%), meth (20% vs. 5%), and injection drugs (13% vs. 2%).

Exposure to violence

As seen in Table 3, similarly for both women and men, those who recently traded sex were more likely to report physical (46.6% and 47.1%) and sexual abuse (37.9% and 33.8%) during childhood, to report being hit (57.8% and 44.2%) and hitting a sex partner (37.1% and 38.8%), and to report being forced by someone (59.5% and 53.8%) and forcing someone (36.2% and 41.7%) to have sex in the past four months compared to those who have not recently traded sex. The differences between transactional sex groups were vast among both genders. For example, 38% of women who traded sex experienced childhood sexual abuse compared to 8% of other women.

Sexual risk

The bottom of Table 3 shows sexual risk by transactional sex and gender. Women and men who traded sex in the past four months were more likely to have been diagnosed with a sexually transmitted infection in the past four months, and to report being HIV positive than other women and men. Women who traded sex were also less likely than other women to report ever being HIV tested (62% vs. 74%); the two male groups did not differ in HIV lifetime testing. Women and men who sold sex were also more likely to report meeting a new sex partner at the bar, and to have had sex on the bar premises. Selling sex was also associated with more alcohol and drug use in sexual contexts for both women and men. Finally, there was a difference in percent unprotected sex among women, but not men – women who recently traded sex reported a higher percentage of unprotected sex than other women ($M=39.26$, $SD=36.51$ vs. $M=29.16$, $SD=40.39$). Trading sex was also associated with more total sex partners in the last four months for both women and men.

We were particularly interested in whether men who traded sex were also more likely to report having more male as well female partners compared to those who have not traded sex. Of the 240 men who reported trading sex, 27% ($n=65$) reported sex with at least one male partner in the past four months, compared to 10.7% ($n=238$) of men who did not report trading sex. To explore the extent to which men who traded sex served as a bridge between men who have sex with men and heterosexual women, we excluded men who only reported male sex partners in the past four months ($n=58$; leaving 2181 men who have not engaged in transactional sex vs. 229 men who have) and found that men who traded sex reported having more male partners compared to men who did not trade sex. Specifically, whereas only 2.4% of men who have not recently traded sex reported having 3 or more male partners, 10.5% of men who have traded sex reported having this many male partners. We also examined whether men who traded sex were more likely to report any sex with *both* women and men in the past four months compared to their non-trading male counterparts. For this analysis we excluded men who did not report any recent sex partners. Indeed, men who traded sex were more likely to sex with both men and women ($OR=2.17$, 95% CI: 1.43 to 3.29, $p < .001$; 18.6% vs. 8.8%).

Multivariate models

We conducted multivariate logistic regression models, separately by gender, that included all variables that were significant ($p < .10$) in bivariate analyses, including demographics. The model for women showed that those who recently traded sex were more likely to be unmarried (AOR=0.40, 95% CI=0.16 to 0.99, $p < .05$), be pregnant (AOR=3.10, 95% CI=1.55 to 6.21, $p < .001$), have drinking problems (AOR=2.12, 95% CI=1.04 to 4.33, $p < .05$), been forced by someone to have sex in the past four months (AOR=6.86, 95% CI=3.46 to 13.58, $p < .001$), and never tested for HIV (AOR=0.39, 95% CI=0.21 to 0.74, $p < .01$). They were also marginally more likely to be HIV positive (AOR=2.23, 95% CI=0.95 to 5.24, $p < .10$) and to have experienced sexual abuse during childhood (AOR=1.81, 95% CI=0.90 to 3.63, $p < .10$).

The model for men showed that those who traded sex were less educated (AOR=0.79, 95% CI=0.63 to 0.97, $p < .05$), more likely to report feeling more relaxed after drinking (AOR=1.71, 95% CI=1.10 to 2.67, $p < .05$), used meth in the past four months (AOR=3.11, 95% CI=1.54 to 6.28, $p < .01$), experienced physical (AOR=1.74, 95% CI=1.17 to 2.58, $p < .01$) and sexual abuse (AOR=2.34, 95% CI=1.45 to 3.78, $p < .001$) during childhood, been hit by a sex partner (AOR=2.00, 95% CI=1.26 to 3.18, $p < .01$), been forced by someone to have sex (AOR=6.50, 95% CI=4.25 to 9.94, $p < .001$), forced someone to have sex (AOR=2.09, 95% CI=1.31 to 3.32, $p < .01$), and had sex on the premises of the bar (AOR=2.38, 95% CI=1.40 to 4.05, $p < .001$).

Gender differences

We examined whether men who traded sex significantly differed from women who traded sex on demographics, substance use, experience with violence, and sexual risk. Table 4 summarizes the results from these analyses. Men who traded sex were more likely than women to be employed (61% vs. 28%), have higher education ($M=2.58$, $SD=0.91$ vs. $M=2.30$, $SD=0.88$), report that sex is better after drinking (47% vs. 34%), have sex on the premises of the bar (25% vs. 15%), and have more total sex partners (45% vs. 33% having 3 or more sex partners). However, they were less likely than women who traded sex to report being hit by a sex partner in the last four months (44% vs. 58%) and to be HIV positive (8% vs. 17%). Apart from these differences, men and women who traded sex were largely similar on substance use, experiences with childhood abuse, forced sex, and sex with alcohol and drugs.

Discussion

This study examined transactional sex among women and men attending alcohol-serving establishments in Cape Town, South Africa. Consistent with previous work, trading sex was associated with a higher likelihood of substance use, childhood abuse, and experiences of violence with a sex partner. Thus, transactional sex was associated with higher HIV infection risk in sites already representative of high-risk behavior (i.e., drinking venues) in South Africa (Morojele et al., 2006; Weir et al., 2003). Importantly, we examined differences between individuals who have and have not recently traded sex, as well as among women and men who traded sex. In contrast to the non-significant difference among

men, women who traded sex reported a higher proportion of recent unprotected sex than women who have not recently traded sex. Women depend on men for the use of condoms, and the circumstances surrounding sexual exchange may make it even more difficult to negotiate safer sex (Mittal et al., 2011; Welch Cline et al., 1992). Despite this difference, results showed that men who traded sex did not differ much from women who traded sex.

Men and women who traded sex looked largely similar to one another in terms of alcohol and drug use, experiences with violence, and risk behaviors. Not surprisingly, men who traded sex reported more sex partners than women who traded sex, even though both reported more partners than their non-transactional sex counterparts. Although they had less sex partners than the men, women who traded sex were more likely to report being hit by a sex partner. In fact, the majority of women who traded sex reported experiencing this type of abuse in the past four months. This in turn may make them more vulnerable to HIV infection, perhaps explaining why the women who sold sex were more likely to report being HIV positive than the men. In general however, engaging in transactional sex was related to increased exposure to violence for both women and men. While this relationship between transactional sex and relationship violence has been documented among men involved in formal sex work (Scott et al., 2005) and among men who have sex with men (Reisner, Mimiaga, Mayer, Tinsley, & Safren, 2008), to our knowledge this is the first time it has been shown among a more general population of men and in South Africa.

Results from this study showed that men who reported recently trading sex also reported more male, as well as female sex partners. Importantly, this result was found among men who did not report sex with solely men. Thus, these men may represent an important bridging group between men who have sex with men and heterosexual women. Unfortunately, our data do not inform to whom these men were selling sex. Therefore, while we've shown that men who have sex with men are more likely to trade sex, we cannot conclude from this study whether it is that men in this context sell sex to other men. Despite this limitation however, the fact that men who were trading sex had more male and female partners suggests that they represent an important group requiring HIV prevention attention.

The behaviors of men who sell sex may not only bridge sexual HIV epidemics—similar to women, men who sold sex reported a higher likelihood of injection drug use than their non-transactional sex counterparts. In fact, men who engaged in transactional sex had almost five times higher odds of injecting drugs. This association between drug use and transactional sex is consistent with previous work (Bobashev, Zule, Osilla, Kline, & Wechsberg, 2009; Hedden et al., 2011; Sherman, Plitt, ul Hassan, Cheng, & Zafar, 2005). Similar to the current sample, one study showed that among a large sample of women and men attending drinking venues in Cape Town, individuals who reported meth use were more likely to also report buying and selling sex (Meade et al., 2012). Indeed, individuals with substance abuse problems may be more likely to sell sex to support their dependence. It may also be that the personal, social, and environmental factors that increase the chances that one sells sex (e.g., limited economic resources, history of abuse) may also make substance abuse more likely. Future research should use mixed and longitudinal research methods to more closely examine the factors and processes underlying the relationship between drug use and transactional sex.

Results of this study should be interpreted in light of its limitations. The current study was cross sectional, precluding causal conclusions regarding the relationships between variables. HIV status was measured by self-report among those who had tested. The scope of our measure of transactional sex was limited in that it did not include other sex acts apart from vaginal/anal sex (e.g., oral), and was not measured at the event-level. That is, we could not identify to whom individuals were selling sex (i.e., men or women) and whether condoms were used in specific transactional sex events, nor the frequency of transaction sex in the past four months. Finally, our sample consisted of South African women and men recruited from drinking venues in a single township in Cape Town. We have no knowledge about whether the findings are generalizable to the larger population. We also only included patrons of the drinking venues and excluded employees, who may be at high risk for provision of transactional sex.

Research on transactional sex has focused primarily on women. Men have primarily been studied in this area as “buyers” of sex, and not “sellers.” The current study adds to the current science to demonstrate similar risk behaviors linked to selling sex among men. The study also builds on qualitative work in the same socio-environmental context of alcohol serving-venues in Cape Town townships. Together with findings by Watt and colleagues (2012) that shows that transactional sex is a gendered and culturally-understood phenomenon in these venues that is linked to alcohol dependence, the current study shows that both women and men sell sex in such contexts, and in similar ways. In a country of limited economic resources and a high rate of hazardous drinking, transactional sex may be a means for both women and men to meet basic needs, and to support alcohol and drug use habits. Here we showed that transactional sex is also associated with higher risk of HIV infection among both women and men. Given the fact that South Africans primarily meet new sex partners in drinking venues like the ones included in the study (Weir et al., 2003), women and men who engage in transactional sex in such establishments require HIV prevention attention. For example, research has shown that intervening with owners and managers of drinking venues in the Philippines can increase risk reduction among women selling sex over and above individual behavior change interventions (Morisky et al., 2010). Similar models may be adapted for use in South African alcohol-serving venues.

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Table 1

Demographics by gender and transactional sex in the past 4 months

	Women (n=1989)						Men (n=2468)					
	Transactional Sex Past 4 Mo.						Transactional Sex Past 4 Mo.					
	No (n=1873)	Yes (n=116)	OR (95% CI)				No (n=2228)	Yes (n=240)	OR (95% CI)			
Age	M	SD	M	SD	n	%	M	SD	M	SD	n	%
	31.98	11.49	29.03	10.77		0.98** (.96, .99)	31.00	9.34	28.30	7.58		0.96*** (.95, .98)
	n		n				n		n			
Race ^a						1.78**						0.92
Black	786	42.0%	61	52.6%			1465	65.8%	148	61.7%		
Coloured	1055	56.3%	46	39.7%			729	32.7%	80	33.3%		
Married	447	23.9%	16	13.8%		0.51* (.30, .87)	526	23.6%	47	19.6%		0.81 (.58, 1.13)
Education						1.09 (.88, 1.35)						0.85* (.74, .98)
Grade 7 or less	343	18.3%	20	17.2%			206	9.2%	27	11.3%		
Grade 8–11	903	48.2%	53	45.7%			723	32.5%	86	35.8%		
Grade 12	455	24.3%	31	26.7%			762	34.2%	83	34.6%		
Beyond Grade 12	168	9.0%	12	10.3%			520	23.3%	41	17.1%		
Employed	541	28.9%	33	28.4%		1.00 (.66, 1.51)	1350	60.6%	146	60.8%		1.02 (.78, 1.35)
Have Children	1345	71.8%	73	62.9%		0.71 [†] (.47, 1.05)	1471	66.0%	139	57.9%		0.73* (.55, .96)
Pregnant/Or partner pregnant	191	10.2%	22	19.0%		2.15** (1.32, 3.51)	257	11.5%	48	20.0%		1.96*** (1.39, 2.77)
Electricity	1760	94.0%	95	81.9%		0.28*** (.17, .46)	2073	93.0%	207	86.3%		0.49*** (.32, .75)
Indoor Water	1673	89.3%	93	80.2%		0.50** (.31, .81)	1938	87.0%	193	80.4%		0.61** (.43, .86)

Notes:

[†] $p < .10$,

* $p < .05$,

** $p < .01$,

*** $p < .001$;

Transactional Sex (0=no, 1=yes);

Black = 1, Coloured = 0

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Table 2

Substance use by gender and transactional sex in the past 4 months

	Women (n=1989)					Men (n=2468)				
	Transactional Sex Past 4 Mo.					Transactional Sex Past 4 Mo.				
	No (n=1873)	Yes (n=116)	n	%	AOR (95% CI)	No (n=2228)	Yes (n=240)	n	%	AOR (95% CI)
<i>Alcohol Expectancies</i>										
Feel more relaxed	1001	53.4%	76	65.5%	1.66* (1.10, 2.51)	1407	63.2%	170	70.8%	1.66** (1.21, 2.28)
Less in control of myself	444	23.7%	36	31.0%	1.27 (.82, 1.97)	595	26.7%	91	37.9%	1.59** (1.18, 2.14)
Less likely to use condom	422	22.5%	54	46.6%	3.06*** (2.04, 4.59)	725	32.5%	106	44.2%	1.70*** (1.28, 2.26)
Sex is better after drinking	291	15.5%	39	33.6%	2.68*** (1.75, 4.10)	633	28.4%	112	46.7%	2.21*** (1.66, 2.95)
<i>Alcohol Frequency</i>										
Never	237	12.7%	7	6.0%	1.34*** (1.13, 1.59)	165	7.4%	18	7.5%	1.14* (1.01, 1.28)
Monthly or less	469	25.0%	23	19.8%		485	21.8%	57	23.8%	
2–4 times a month	481	25.7%	29	25.0%		575	25.8%	41	17.1%	
2–3 times a week	488	26.1%	30	25.9%		616	27.6%	69	28.8%	
More than 4 times a week	194	10.4%	27	23.3%		368	16.5%	51	21.3%	
<i>Alcohol Quantity</i>										
I don't drink	219	11.7%	4	3.4%	1.33*** (1.17, 1.51)	132	5.9%	11	4.6%	1.05 (.97, 1.15)
1–2	482	25.7%	20	17.2%		475	21.3%	44	18.3%	
3–4	429	22.9%	23	19.8%		479	21.5%	51	21.3%	
5–6	340	18.2%	24	20.7%		374	16.8%	40	16.7%	
7–9	125	6.7%	18	15.5%		172	7.7%	24	10.0%	
10 or more	274	14.6%	27	23.3%		585	26.3%	67	27.9%	
<i>Binge Drinking Frequency</i>										
Never	319	17.0%	13	11.2%	1.40*** (1.17, 1.67)	229	10.3%	18	7.5%	1.19** (1.05, 1.35)
Less than monthly	425	22.7%	21	18.1%		496	22.3%	49	20.4%	
Monthly	398	21.2%	16	13.8%		477	21.4%	49	20.4%	
Weekly	628	33.5%	52	44.8%		827	37.1%	87	36.3%	
Daily or almost daily	96	5.1%	14	12.1%		185	8.3%	35	14.6%	

	Women (n=1989)						Men (n=2468)					
	Transactional Sex Past 4 Mo.						Transactional Sex Past 4 Mo.					
	No (n=1873)		Yes (n=116)		AOR (95% CI)		No (n=2228)		Yes (n=240)		AOR (95% CI)	
	n	%	n	%			n	%	n	%		
Problem Drinking (CAGE)	1170	62.5%	90	77.6%	2.07** (1.29, 3.30)		1470	66.0%	175	72.9%	1.31 [†] (.96, 1.79)	
Current Drinking (Came to bar to drink tonight)	1218	65.0%	90	77.6%	1.79* (1.12, 2.87)		1780	79.9%	191	79.6%	1.05 (.74, 1.49)	
<i>Drug Use last 4 mo.</i>												
Marijuana (Dagga)	196	10.5%	30	25.9%	2.86*** (1.78, 4.58)		468	21.0%	73	30.4%	1.35 [†] (.98, 1.86)	
Sniffers	29	1.5%	18	15.5%	10.39*** (5.22, 20.70)		83	3.7%	42	17.5%	4.27*** (2.77, 6.60)	
Methamphetamines (Tik)	98	5.2%	25	21.6%	4.48*** (2.62, 7.64)		112	5.0%	48	20.0%	3.98*** (2.65, 5.99)	
Injection Drugs	24	1.3%	16	13.8%	10.88*** (5.17, 22.91)		51	2.3%	30	12.5%	4.60*** (2.76, 7.68)	

Notes:

[†] $p < .10$,* $p < .05$,** $p < .01$,*** $p < .001$;

Transactional Sex (0=no, 1=yes); Adjusting for age, race (among women), marital status (among women), education (among men), children, pregnancy, electricity, and indoor water.

Table 3

Exposure to violence and sexual risk by gender and transactional sex in the past 4 months

	Women (n=1989)					Men (n=2468)				
	Transactional Sex Past 4 Mo.					Transactional Sex Past 4 Mo.				
	No (n=1873)	Yes (n=116)	n	%	AOR (95% CI)	No (n=2228)	Yes (n=240)	n	%	AOR (95% CI)
Childhood Physical Abuse	326	17.4%	54	46.6%	4.24*** (2.82, 6.42)	425	19.1%	113	47.1%	3.73*** (2.79, 4.98)
Childhood Sexual Abuse	143	7.6%	44	37.9%	6.50*** (4.19, 10.08)	139	6.2%	81	33.8%	7.15*** (5.11, 9.99)
Hit by a sex partner last 4 mo.	277	14.8%	67	57.8%	6.94*** (4.59, 10.48)	198	8.9%	106	44.2%	7.71*** (5.65, 10.51)
Hit a sex partner last 4 mo.	180	9.6%	43	37.1%	5.92*** (3.83, 9.15)	226	10.1%	93	38.8%	5.40*** (3.97, 7.35)
Forced to have sex last 4 mo.	143	7.6%	69	59.5%	18.64*** (12.03, 28.62)	168	7.5%	129	53.8%	13.78*** (10.04, 18.62)
Forced someone to have sex last 4 mo.	84	4.5%	42	36.2%	11.61*** (7.25, 18.62)	166	7.5%	100	41.7%	9.14*** (6.62, 12.61)
STI last 4 mo.	68	3.6%	23	19.8%	6.67*** (3.86, 11.53)	113	5.1%	55	22.9%	5.65*** (3.88, 8.23)
HIV Tested	1392	74.3%	72	62.1%	0.55** (.36, .83)	1418	63.6%	134	55.8%	0.79 (.60, 1.06)
HIV Positive ^a	99	5.3%	20	17.2%	5.30*** (2.96, 9.49)	88	3.9%	19	7.9%	2.97*** (1.71, 5.16)
Met a new sex partner at bar	233	12.4%	48	41.4%	4.88*** (3.18, 7.47)	584	26.2%	103	42.9%	2.15*** (1.60, 2.89)
Had sex on premises of bar	34	1.8%	17	14.7%	8.98*** (4.73, 17.08)	120	5.4%	60	25.0%	5.06*** (3.52, 7.27)
Total sex partners last 4 mo.					2.36*** (1.87, 2.96)					1.43*** (1.24, 1.64)
0	459	24.5%	13	11.2%		394	17.7%	49	20.4%	
1	1082	57.8%	41	35.3%		915	41.1%	44	18.3%	
2	202	10.8%	21	18.1%		358	16.1%	37	15.4%	
3 or more	124	6.6%	38	32.8%		550	24.7%	107	44.6%	
MSM behavior	--	--	--	--	--	238	10.7%	65	27.1%	2.93*** (2.10, 4.07)
Total male sex partners	--	--	--	--	--					1.73*** (1.47, 2.02)
among MSMW ^b										
0						1965	90.1%	172	75.1%	
1						105	4.8%	19	8.3%	
2						33	1.5%	11	4.8%	
3 or more						53	2.4%	24	10.5%	

	Women (n=1989)						Men (n=2468)					
	Transactional Sex Past 4 Mo.						Transactional Sex Past 4 Mo.					
	No (n=1873)			Yes (n=116)			No (n=2228)			Yes (n=240)		
	n	%		n	%		n	%		n	%	
Total female sex partners among MSMW	--	--	--	--	--	--						
0							394	18.1%		49	21.4%	1.30*** (1.13, 1.49)
1							978	44.8%		55	24.0%	
2							313	14.4%		34	14.8%	
3 or more							484	22.2%		88	38.4%	
Sex acts with alcohol last 4 mo.												1.13*** (1.06, 1.21)
0	1133	60.5%		37	31.9%		934	41.9%		88	36.7%	
1	158	8.4%		13	11.2%		194	8.7%		15	6.3%	
2	150	8.0%		9	7.8%		211	9.5%		18	7.5%	
3	84	4.5%		6	5.2%		143	6.4%		14	5.8%	
4	101	5.4%		7	6.0%		171	7.7%		22	9.2%	
5 or more	230	12.3%		40	34.5%		531	23.8%		79	32.9%	
Sex acts with drugs last 4 mo.												1.96*** (1.64, 2.35)
0	1730	92.4%		74	63.8%		1983	89.0%		163	67.9%	
1	52	2.8%		14	12.1%		63	2.8%		16	6.7%	
2 or more	77	4.1%		25	21.6%		162	7.3%		57	23.8%	
	M	SD		M	SD		M	SD		M	SD	
Percent unprotected sex last 4 mo.	29.16	40.39		39.26	36.51		31.59	39.49		34.48	35.11	1.20 (.84, 1.73)
												1.77* (1.11, 2.83)

Notes: Results from bivariate analyses are presented;

[†] $p < .10$,

* $p < .05$,

** $p < .01$,

*** $p < .001$; Transactional Sex (0=no, 1=yes);

^a among those tested;

^b excluding 58 men who only had male partners; Adjusting for age, race (among women), marital status (among women), education (among men), children, pregnancy, electricity, and indoor water.

Notes:

[†] $p < .10$,
* $p < .05$,
** $p < .01$,
*** $p < .001$; Transactional Sex (0=no, 1=yes);

^a among those tested;

^b MSMW = men who have sex with men and women, excluding 58 men who only had male partners,

^c excluding 55 women who only had female partners; Adjusting for age, race (among women), marital status (among men), education (among women), children, pregnancy, electricity, and indoor water.

Table 4

Gender differences

	Women who sold sex (n=116)		Men who sold sex (n=240)		χ^2
	n	%	n	%	
Demographics					
Race					1.94
Black	61	52.6%	148	61.7%	
Coloured	46	39.7%	80	33.3%	
Married	16	13.8%	47	19.6%	1.99
Employed	33	28.4%	146	60.8%	32.37***
Have Children	73	62.9%	139	57.9%	0.95
Pregnant or Partner Pregnant	22	19.0%	48	20.0%	0.02
Have Electricity	95	81.9%	207	86.3%	2.16
Have Indoor Water	93	80.2%	193	80.4%	0.00
Alcohol Expectancies					
Feel more relaxed	76	65.5%	170	70.8%	1.73
Less in control of myself	36	31.0%	91	37.9%	2.07
After I am less likely to use a condom	54	46.6%	106	44.2%	0.13
Sex is better after drinking	39	33.6%	112	46.7%	5.98*
Alcohol Frequency					
Never	7	6.0%	18	7.5%	3.61
Monthly or less	23	19.8%	57	23.8%	
2–4 times a month	29	25.0%	41	17.1%	
2–3 times a week	30	25.9%	69	28.8%	
More than 4 times a week	27	23.3%	51	21.3%	
Alcohol Quantity					
I don't drink	4	3.4%	11	4.6%	3.70
1–2	20	17.2%	44	18.3%	
3–4	23	19.8%	51	21.3%	
5–6	24	20.7%	40	16.7%	
7–9	18	15.5%	24	10.0%	

	Women who sold sex (n=116)		Men who sold sex (n=240)		χ^2
	n	%	n	%	
10 or more	27	23.3%	67	27.9%	
Binge Drinking Frequency					5.14
Never	13	11.2%	18	7.5%	
Less than monthly	21	18.1%	49	20.4%	
Monthly	16	13.8%	49	20.4%	
Weekly	52	44.8%	87	36.3%	
Daily or almost daily	14	12.1%	35	14.6%	
Problem Drinking (CAGE)	90	77.6%	175	72.9%	0.58
Current Drinking (Came to bar to drink tonight)	90	77.6%	191	79.6%	0.34
Drug Use last 4 mo.					
Marijuana (Dagga)	30	25.9%	73	30.4%	0.36
Sniffers	18	15.5%	42	17.5%	0.12
Methamphetamines (Tik)	25	21.6%	48	20.0%	0.28
Injection Drugs	16	13.8%	30	12.5%	0.20
Childhood Physical Abuse	54	46.6%	113	47.1%	0.00
Childhood Sexual Abuse	44	37.9%	81	33.8%	0.60
Hit by a sex partner last 4 mo.	67	57.8%	106	44.2%	5.13 *
Hit a sex partner last 4 mo.	43	37.1%	93	38.8%	0.02
Forced to have sex last 4 mo.	69	59.5%	129	53.8%	0.90
Forced someone to have sex last 4 mo.	42	36.2%	100	41.7%	1.17
STI last 4 mo.	23	19.8%	55	22.9%	0.49
HIV Tested	72	62.1%	134	55.8%	1.00
HIV Positive ^a	20	17.2%	19	7.9%	5.90 *
Met a new sex partner at bar	48	41.4%	103	42.9%	0.01
Had sex on premises of bar	17	14.7%	60	25.0%	5.11 *
Total sex partners last 4 mo.					16.38 ***
0	13	11.2%	49	20.4%	
1	41	35.3%	44	18.3%	
2	21	18.1%	37	15.4%	

	Women who sold sex (n=116)		Men who sold sex (n=240)		χ^2
	n	%	n	%	
3 or more	38	32.8%	107	44.6%	
<i>Sex with alcohol last 4 mo.</i>					4.02
0	37	31.9%	88	36.7%	
1	13	11.2%	15	6.3%	
2	9	7.8%	18	7.5%	
3	6	5.2%	14	5.8%	
4	7	6.0%	22	9.2%	
5 or more	40	34.5%	79	32.9%	
<i>Sex with drugs last 4 mo.</i>					3.08
0	74	63.8%	163	67.9%	
1	14	12.1%	16	6.7%	
2 or more	25	21.6%	57	23.8%	
	M	SD	M	SD	t
Age	29.03	10.77	28.30	7.58	0.66
Education	2.30	0.88	2.58	0.91	-2.76**
Percent unprotected sex last 4 mo.	40.30	36.42	34.49	35.11	1.43

Notes:

†
 $p < .10$,*
 $p < .05$,**
 $p < .01$,***
 $p < .001$