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Young Thai women who use methamphetamine: Intersection of sexual partnerships, drug use, and social networks

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Abstract

Background—Given high rates of methamphetamine (MA) use among young people in Thailand and evidence of an association between MA and increased sexual risk behavior, we examined the association between women's recent sexual partnerships, social network characteristics and drug and alcohol use.

Methods—Female participants (n=320) in an HIV behavioral trial among young (18–25 years) MA users in Chiang Mai completed a drug and sexual behavior survey and social network inventory. Multinomial regression analyses accounting for clustered data examined individual and network characteristics associated with recent sexual partnership category. We compared women with only one male partner in the past year (39%) to those with multiple male partners (37%) and those with only female partners (24%).

Results—Differences in levels of drug and alcohol use and social and sexual network characteristics were dependent on recent sexual partnership profiles. The multiple partner group reported an average of five male partners in the past year; 12% reported consistent condom use in the past 30 days. Compared to both groups, women with multiple male partners used MA more frequently, had larger non-sex networks with more MA users, were more likely to have an MA-using sex partner, and received less emotional support from their partners. Women with multiple male partners and only female partners reported more frequent alcohol use.

Conclusions—Policy and intervention efforts targeting drug use and sexual behavior among young Thai women are drastically needed and may benefit from consideration of the diversity within the population. These data point to the need for targeted prevention approaches that take into account the varying characteristics and social influences of these different groups of women.

Keywords

women; Thailand; methamphetamine; sex partners; social network

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Introduction

Methamphetamine (MA) remains a dominant drug in Thailand (Kulsudjarit, 2004; United Nations Office on Drugs and Crime, 2005), used particularly among young people (Verachai, Dechongkit, Patarakorn, & Lukanapichonchut, 2001; Sattah *et al.*, 2002). Limited research has explored the role of MA as an influence on sexual behavior among women and relatively little is known about on the individual and social-level predictors of sexual risk and its consequences within this population. This study sought to examine drug use patterns and social network characteristics associated with having multiple male partners in the past year, compared to having only one male partner and having only female partners among a sample of young female MA users in northern Thailand.

HIV prevalence among Thai MA users is higher than the rate among the general Thai adult population (approximately 3% compared to 1.5%) (UNAIDS, 2006; Beyrer *et al.*, 2004; Razak *et al.*, 2003) and MA use was associated with HIV infection among female drug users (Srirak *et al.*, 2005). Epidemiological studies show high levels of sexual experience among young Thais (Allen *et al.*, 2003; Jenkins *et al.*, 2002; van Griensven *et al.*, 2001). Although visits to commercial sex workers (CSWs) have become more rare (VanLandingham *et al.*, 2002) due largely to a history of focused HIV prevention efforts (Nelson *et al.*, 1996; Rojanapithayakorn & Hanenberg, 1996), unprotected sex within non-commercial sexual relationships remains common (Mills *et al.*, 1997; Jenkins *et al.*, 2002; Lertpiriyasuwat, Plipat, & Jenkins, 2003). A variety of studies have documented the changing social and economic context in Thailand, resulting in greater sexual awareness, increased social and sexual freedoms, and less familial influence (Morrison, 2004; VanLandingham & Trujillo, 2002; Vuttanont, Greenhalgh, Griffin, & Boynton, 2006), in addition to a normative shift in favor of pre-marital sexual activity among young Thais, with low levels of perceived HIV risk (Morrison, 2004).

MA use has been associated with increased libido, sex with anonymous partners, trauma from prolonged intercourse and failure to use condoms while high (Hando & Hall, 1994; Kall *et al.*, 1995). Existing research among Thais indicates an association between MA use and STI prevalence among adult males (Melbye *et al.*, 2002) and with being sexually active (Liu *et al.*, 2006), having two or more lifetime sex partners (Allen *et al.*, 2003; Sattah *et al.*, 2002) and pregnancy (Manopaiboon *et al.*, 2003) among female students. Given persistently high rates of HIV among certain population groups in Thailand, there remains great potential for HIV transmission among Thai young people as HIV enters their social networks.

The literature on sexual behavior among young Thais has largely focused on heterosexual behavior, yet this does not represent the full spectrum of sexual partnerships in this population. Although representation and expression of sexual diversity have had a long history in Thai culture, few studies have documented the prevalence of same-sex partnerships among women. Almost 10% of female secondary school students in Bangkok reported “homosexual contact” (O-Prasertsawat & Petchum, 2004) and 8% of female northern Thai students aged 15–21 identified with Thai terms noted as equivalent to ‘homosexual’ or ‘bisexual’, with 10% reporting same sex attraction (van Griensven *et al.*, 2004). Although U.S. research shows higher rates of substance use (Cochran, Ackerman, Mays, & Ross, 2004; Scheer *et al.*, 2002) and risk behaviors (Bell, Ompad, & Sherman, 2006; Gonzales *et al.*, 1999) among women who have sex with women, little is known about the drug use and relationship dynamics among Thai women who have female partners.

HIV prevention researchers have asserted that comprehensive examinations of risk behavior must evaluate the social dimensions of behavior in addition to individual-level factors (Latkin & Knowlton, 2000; Rhodes & Quirk, 1998). Such a perspective emphasizes that risk behaviors are impacted by social context, influences and norms and often occur in dyads or groups. Sexual

risk behaviors among drug users have been shown to be associated with average number of drug users within a network (Latkin et al., 1995; Neaigus et al., 1996); using drugs with sex partners (Miller & Neaigus, 2002); and differential age mixing within sexual networks (Catania, Binson, & Stone, 1996). The effect of network substance use and norms on sexual behavior and personal drug and alcohol use has also been shown among women in northern Thailand (Bond, Valente & Kendall, 1999).

The association between MA use and sexual behavior has not been well understood, particularly among young Thai women. Additionally, knowledge of social and drug-related influences related to sexual behavior among this population is lacking and is of critical importance to designing effective prevention strategies. This study seeks to identify individual and social level influences across three groups of female MA users based on past year sexual partnerships. It was anticipated that women with multiple partners would be more frequent MA users, have larger networks with more MA use, and have less supportive relationships with partners compared to the other two groups.

Data and methods

Data were collected as part of the baseline survey for a two-arm randomized behavior change intervention trial in Chiang Mai Province, Thailand among MA users aged 18–25 and their social network members. The larger study aims to evaluate the efficacy of a peer-education network-oriented intervention with a best practice life skills curriculum for preventing HIV risk behaviors and reducing MA use frequency among young MA users and their network members (drug using partners and sexual partners). A total of 1034 individuals (453 indexes and 581 of their network members) completed baseline interviews between April 2005 and March 2006. The study was reviewed and approved by the Thai Ministry of Public Health Ethical Committee, Chiang Mai University Human Experiment Committee and Johns Hopkins Committee on Human Research.

Study population

Index participants were recruited through targeted outreach throughout Chiang Mai province. Eligible index participants were males and females between 18 and 25 years who reported MA use at least three times in the past three months and sex at least three times in the past three months and could list and enroll eligible members of their sexual or drug networks. As this was a peer outreach trial associated with drug and sexual behaviors, index participants were required to bring at least one member of their drug or sex networks for study enrollment. Eligible network members were 18 years or older who reported either MA use at least three times in the past three months or sex with the index at least three times in the last three months. Prior to participating, respondents completed informed consent procedures in Thai and signed a consent form. Respondents received a small remuneration for their study participation time. The analyses presented here were limited to sexually active female study participants.

Instrument and measures

Trained Thai interviewers orally administered a 50-minute baseline comprehensive behavioral and personal network inventory. Interviews were administered in the Thai language and in native ethnic minority languages as necessary. Survey questions and measures were originally developed in English, translated into Thai and then pilot tested with members of the target population for translation appropriateness and comprehensibility. Back-translation was done to ensure the validity of the final questionnaire. The survey included questions regarding socio-demographic characteristics, drug and alcohol use history, sexual behavior history, social network characteristics and sexual and drug use norms.

The sex partner category variable was based on the number of male and female sex partners respondents reported in the baseline survey for the past 12 months. Respondents were coded in the multiple male partner group if they reported two or more male sex partners in the past 12 months and in the one male partner group if they reported only one male partner. Respondents who reported no male partners in the past 12 months and at least one female partner were coded into the female only group. In order to identify factors associated with increased sexual risk, the multiple partner group was used as the referent category for both other groups.

Individual level variables were collected through self-report response to baseline survey questions. Education level and participant age were dichotomized around their median values due to skewed distributions. Categorical responses regarding living situation in the past six months were dichotomized due to low frequencies. Personal alcohol and MA use were assessed by asking how many days in the past week the respondent used each substance, respectively, and were coded around the median responses to distinguish frequent users.

Network level variables were assessed using a comprehensive network inventory for which respondents listed and described those in their social, support, drug and sex networks in response to a systematic series of questions. For each listed person, respondents were asked to describe the gender, age, nature and duration of their relationship and frequency of contact. Emotional support was measured as network members the respondent could talk to about things that were personal or private. Network member MA use was measured as those individuals who currently used MA, regardless of whether they used MA with the respondent. Age difference was calculated by subtracting the respondent's age from the mean network age. Network characteristics were calculated separately for sex partners and non-sex partners, which included family, friends and other non-sexual relationships. Sex partners in the network were those identified by the respondent as someone they had sex with in the past six months. Sex network variables were coded dichotomously to indicate presence of the characteristic within the respondent's total sex network. Non-sex network variables were assessed as continuous variables and reflect the number of people with the characteristic.

Statistical analyses

Of 323 female respondents, three were excluded because they were not sexually active and three because they had no partners in the past 12 months. Eight respondents in the one male partner group and four in the multiple male partner group who listed at least one female partner in their sex network were also excluded. The final sample includes 305 sexually active young female MA users whose sex partners in the past six months were exclusively male or female.

Two-tailed chi-square and independent t-tests were used to compare demographic characteristics, drug and alcohol use and theoretically relevant characteristics of sex and non-sex networks across the three groups. Independent variables significant at $p < 0.10$ in the bivariate analysis for either comparison were included in multinomial regression models accounting for clustered data with simultaneous variable entry. Multinomial regression uses relative risk ratios (RRRs) to compare each level of the outcome variable to a referent category (e.g. multiple male partner group). RRRs approximate odds ratios and can be similarly interpreted. The final model includes qualities and characteristics of relationships with sex and non-sex network members including age difference, MA use and emotional support, as well as individual drug and alcohol use. The model also controls for size of non-sex network. Stata 8.0 was used for all analyses.

Results

Of the 305 respondents, 39% reported only one male partner in the past year, 37% reported two or more male partners and 24% had at least one female partner and no male partners. Those with multiple partners in the past year had an average of five recent partners and 13 lifetime partners. Those with only one partner in the past year had five lifetime partners on average. Those with only female partners in the past year had an average of three partners in the past year. A small portion of those with multiple male partners and only female partners reported having any lifetime same- and opposite sex partners, respectively. Levels of condom use among those with male partners were low, with approximately 12% of both groups with male partners reporting consistent condom use in the past 30 days.

Sample characteristics are presented in Table 1. The three groups were similar in age, with most respondents under 20 years old. In each group, approximately half were currently in school. Many respondents lived with a parent or relative as expected; this was most common among those with only female partners (65%). Age of MA initiation was similar across groups. About half of each group used MA at least weekly and this was highest among those with multiple partners (73%). Those with only one male partner were least likely to use alcohol more than once a week (53%) although all three groups had high rates of frequent alcohol use.

Table 2 displays characteristics of respondents' sex and non-sex networks for each of the three groups. Almost all respondents listed at least one sex network member, with between one and two mean partners across groups. Difference in age between respondent and sex partners was greatest among those with only one male partner (difference = 1.27, SD=2.43) and smallest among those with only female partners (difference = 0.04, SD=1.90). Those with only one male partner were most likely to receive emotional support from a partner (51%). Those with multiple male partners were most likely to have a sex partner who used MA (88%), although this was common in all groups.

Those with multiple partners had more people in their non-sex networks (7.40, SD=3.14) and more non-sex network members who used MA (5.76, SD=2.69). The one partner group had the greatest mean age difference between the respondent and non-sex network member (1.68, SD=3.45). The three groups were similar in the average number of supportive non-sex partners.

Table 4 shows the results of the unadjusted and adjusted multinomial regression models of age difference, social support and substance use within sex and non-sex networks, accounting for individual drug and alcohol use. Multivariate analysis showed that individuals with only female partners were closer in age to their sex partners than the multiple partner group. Participants with female partners were twice as likely to receive emotional support from a sex partner and were 80% less likely to have an MA-using sex partner. The female partner group had significantly fewer people in their non-sex networks and was 65% less likely to use MA weekly.

In the multivariate analysis, those with only one sex partner were more than twice as likely to receive emotional support from a sex partner and 80% less likely to have a sex partner who used MA compared to those with multiple partners. Those with only one male partner were half as likely to drink alcohol more than once a week and were 60% less likely to use MA at least weekly. Consistent with the unadjusted model, mean age difference between sex partner and respondent and living with a parent was not significantly associated with having only one male partner compared to multiple partners.

Discussion

This study examines individual and social level influences among three groups of female MA users based on past year sexual partnerships. Overall, these results demonstrate the diversity

that exists among young Thai female MA users. Differences in levels of drug and alcohol use and social and sexual network characteristics were dependent on recent sexual partnership profiles. As hypothesized, those with multiple partners differed from the rest of the sample in many of these characteristics. In contrast to women with only one male partner and with only female partners in the past year, women with more than one male partner used MA more frequently, were more likely to have an MA-using sex partner, and received less emotional support from their partners. They also had larger non-sex networks who also used MA. Social network analysis provides a useful framework for understanding differences in sexual and drug use behaviors among female MA users, with potential implications for addressing substance use and sexual risk reduction in this population.

The level of sexual experience among women in this sample who had male partners is noteworthy. Published research shows an average of up to three lifetime partners among young sexually active Thai women (Bond *et al.*, 1999; Jenkins *et al.*, 2002). This group of MA-using young women reported substantially higher numbers of lifetime male partners, with a mean of five lifetime partners among those with only one partner in the past year and a mean of 13 lifetime partners among those with multiple partners in the past year. On average, those in the multiple partner group reported five male sex partners in the past year; this is a group who may be at elevated risk for HIV and other sexually transmitted infections, given the high partner turnover and low condom use.

These findings suggest a context in which sexual partnerships are influenced by the degree of MA use on both a personal and network level. Although the cross-sectional design does not allow investigation into the direction of these associations, there is reason for concern. Since partner turnover and concurrency increase the likelihood of STI and HIV exposure due to sexual mixing (Miller & Neaigus, 2001), young Thai women who use MA more frequently face far greater risk of transmission.

The association between having multiple partners and more network drug use has been demonstrated in other settings (Bond *et al.*, 1999; Latkin *et al.*, 1995; Neaigus *et al.*, 1996). There are a variety of possible explanations for this. Individual drug use is often associated with drug use within one's network, due in part to heightened drug access and availability that creates a facilitating environment for use. Additionally, social networks are often sources of normative influences in which network members' behaviors influence individual behaviors, whether through direct peer influence or modeling. Latkin and colleagues (2003) demonstrated a pathway between network drug use and sexual risk, where network drug use was associated with network condom use norms which in turn predicted individual condom use behaviors. Thus, young Thai MA users with multiple partners face substantial social and environmental factors that may contribute to their own increased MA use, challenging any attempt to reduce MA use levels and potentially facilitating social norms for enhanced sexual risk.

Despite shifting sexual norms, young Thai women are expected to maintain sexual modesty and resist open communication about sex, which diminishes their potential for sexual negotiation (Morrison, 2004). In the context of drug and alcohol use, young women's capacity for sexual decision-making and communication may be further compromised. Women with multiple partners were much more likely to have a partner who used MA than the other groups and were less likely to receive emotional support from their partners, suggesting a less intimate relationship that may present further barriers to sexual communication as others have noted in studies of female drug users (Miller *et al.*, 2002).

While young females with only one male partner and only female partners were similar on many characteristics in contrast to the multiple partner group, there were some differences between these two groups as well. The results showed that those with female only partners

were closer in age to their partners than the multiple partner group, while the groups with only one male partner and multiple male partners had partners who were approximately 1–2 years older. This is consistent with existing research showing young Thai women's male partners to be of similar age up to approximately three years older (Allen *et al.*, 2003) and female partnerships to be closer in age than heterosexual partnerships (van Griensven *et al.*, 2004).

It should be noted that the categories of young women discussed in this analysis were derived from the data and do not represent naturally occurring discrete sub-groups. The high proportion of women in the sample with only female recent partners was unexpected, given that the few previous estimates were much lower. As others have noted, Thai gender and sexual nuance make measurement of such activity particularly challenging (Jackson, 1999; Thaweesit, 2004). This study assessed reported recent same sex behavior rather than sexual identity or preference as in other studies, which may have contributed to the numbers observed here. Sinnot (2004) highlights that in Thailand "homosexual behavior does not necessarily lead to an identity, nor does it necessarily constitute a distinct transgression of sexual or gender norms" (page 4). It is also possible that the network-based recruitment utilized in this study may have contributed to the distributions observed in this study, as network members may have recruited others with similar characteristics in greater proportions than probability based sampling.

Nonetheless, these data suggest that differences in young women's sexuality should be considered in the context of substance use and shifting sexual norms. Women with only female partners reported frequent alcohol use, similar to those with multiple partners. Prior research has shown high rates of alcohol use among women who partner with women, which may suggest a need for targeted intervention efforts (van Griensven *et al.*, 2004). However, these women did not have higher levels of MA use in contrast to U.S. data showing elevated drug use among homosexually active populations (Cochran *et al.*, 2004). Further research is needed to understand and address substance use patterns among Thai women who partner with women and the influence of their relationship dynamics with family and friends.

There are some limitations to this research that limit our inferences from the data. This study was limited to exploration of drug use and social network dynamics according to recent sex partner characteristics. While number of male sex partners is a strong indicator of potential disease transmission, condom use with partners is a protective factor that was not fully explored in this research due to the low levels of condom use among those who had male partners, as has been shown by others (Allen *et al.*, 2003; Thato, Charron-Prochownik, Dorn, Albrecht, & Stone, 2003). Interventions are needed to address condom use among young Thais and further research should explore this dimension of sexual risk behavior among Thai MA-using women. Study eligibility was limited to those over 18 years of age, thus we cannot generalize findings to younger Thai MA users, a population with high rates of MA use and of great concern for sexual HIV transmission. All data were self-reported and it is possible that social desirability shaped participant responses. Additionally, these data are cross-sectional which eliminates the ability to determine directional causality. There is also some risk of sampling bias due to recruitment time periods and locations, although it is hoped that the variety of recruitment sources and the network recruitment helped to mitigate this concern. Since early 2003, the Thai government implemented a national campaign to eradicate drug use. It is possible that drug users were more reticent to participate in research or share accurate information in such a context. However, the research took place in an unmarked building and the Thai research team worked closely with the police to ensure participant safety. Additionally, the research team has a long history of work with Thai drug users and established an active community advisory board to provide advice to ensure respondent safety and trust.

These data point to the need for targeted prevention approaches that take into account the varying needs and characteristics of these different groups of women. For example, dyad-focused and partner communication strategies may be particularly effective for those with only one male partner, whereas peer-based approaches may be more effective among women who partner only with other women. Strategies that focus on reduction of MA use in the context of widely available drugs and peer influence may be most beneficial for those with multiple partners. STI and HIV prevention messages which address issues relevant to short term partnerships and sex while using MA should also be prioritized for this latter group. Condom interventions are a critical need among women who have male partners. School-based interventions are popular among young Thais and may be an effective vehicle for addressing sex and drug related risks, particularly with a broadened curriculum to better meet the needs of the current sexual climate, as suggested by a recent evaluation study (Vuttanont *et al.*, 2006).

Since the categories of women identified in this research may not be easily recognized or targeted, network based intervention approaches may be particularly effective mechanisms for prevention efforts among young Thai women (Dickson-Gomez, Weeks, Martinez & Convey, 2006; Latkin, 1998). Network and peer-based interventions have shown promise in a variety of international settings particularly among injection drug users (Ball, Rana & Dehne, 1998). Network interventions rely on trained individuals to disseminate information and skills to those in their social networks. Such an approach allows messages to be delivered by a trusted and validated source and can be individually tailored to best fit the audience. Network-based approaches may also help to address within-network social influences by shaping social norms to promote reduction of substance use and sexual risk behavior.

These data highlight the heterogeneity that exists among young female Thai MA users and demonstrate that sexual risk is not uniformly distributed among MA using women. There is a spectrum of substance use and social influence within this population, which differs according to patterns of sexual partnerships. The greatest levels of substance use were among those young women with multiple partners, who report very high numbers of lifetime and recent partners and infrequent condom use. Policy and intervention efforts targeting drug use and sexual behavior among young Thai women are drastically needed and may benefit from consideration of the diversity within the population.

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Table 1Individual characteristics by sex partner category of 305 young northern Thai female methamphetamine users^a

Variables	Only same sex partner(s) in past 12 months N=72 N(%)	Only one opposite sex partner in past 12 months N=120 N(%)	Two or more opposite sex partners in past 12 months N=113 N(%)
Thai ethnicity	72 (100.00)	120 (100.00)	112 (99.12)
Age > 20	14 (19.44)	36 (30.00)	26 (23.01)
Education > secondary school	18 (25.00)	24 (20.00)	25 (22.12)
Currently in school	35 (48.61)	57 (47.50)	60 (53.10)
Live with parent or relative **	47 (65.28)	53 (41.41)	54 (46.55)
Age at first MA: mean (SD)	15.49 (1.70)	15.78 (1.84)	15.54 (1.74)
Currently not using MA	1 (1.45)	6 (5.45)	2 (1.79)
Use MA at least once a week ***	36 (50.00)	57 (47.50)	83 (73.45)
Use alcohol more than once a week ***	56 (77.78)	68 (53.54)	92 (79.31)

^aChi-square tests and *t*-tests, 2-tailed*
 $p < .05$ **
 $p < .01$ ***
 $p < .001$

Table 2

Sex and non-sex network characteristics of 305 young northern Thai female methamphetamine users by sex partner category^a

Variables	Only same sex partner(s) in past 12 months N=72 Mean (SD)	Only one opposite sex partner in past 12 months N=120 Mean (SD)	Two or more opposite sex partners in past 12 months N=113 Mean (SD)
Mean age difference between respondent and sex partners **	0.04 (1.90)	1.27 (2.43)	1.00 (2.38)
Emotional support from sex partner: # (%) **	29 (40.28)	61 (50.83)	35 (30.97)
Sex partner who uses MA: # (%) ***	42 (58.33)	84 (70.00)	99 (87.61)
Size of non-sex partner network **	6.31 (2.55)	6.27 (2.69)	7.40 (3.14)
Mean age difference between respondent and non-sex partners ***	0.25 (1.54)	1.68 (3.45)	0.75 (1.90)
# non-sex partners who provide emotional support	2.25 (1.84)	2.63 (1.77)	2.84 (2.18)
# non-sex partners who use MA **	5.01 (2.62)	4.48 (3.05)	5.76 (2.69)

^a Chi-square tests and *t*-tests, 2-tailed

*
 $p < .05$

**
 $p < .01$

 $p < .001$

Table 3

Multinomial regression of individual and social network characteristics on sex partner category among young Thai female methamphetamine users

Model n=292	Only female partners compared to multiple male partners		Only one male partner compared to multiple male partners	
	Unadjusted RRR (95% C.I.)	Adjusted RRR (95% C.I.)	Unadjusted RRR (95% C.I.)	Adjusted RRR (95% C.I.)
<i>Network</i>				
Mean age difference between respondent and sex partners	0.80 ^{**} (0.69, 0.93)	0.76 ^{**} (0.66, 0.89)	1.04 (0.94, 1.15)	0.98 (0.86, 1.11)
Sex partner who provides emotional support	1.56 (0.85, 2.87)	2.04 [*] (1.00, 4.14)	2.46 ^{**} (1.42, 4.27)	2.19 [*] (1.16, 4.14)
Sex partner who uses MA	0.22 ^{***} (0.11, 0.47)	0.17 ^{***} (0.07, 0.40)	0.37 ^{**} (0.19, 0.70)	0.27 ^{**} (0.11, 0.63)
Mean age difference between respondent and non-sex partners	0.86 (0.73, 1.02)	0.96 (0.80, 1.15)	1.13 [*] (1.03, 1.23)	1.12 (0.98, 1.29)
Number non-sex partners who use MA	0.91 (0.82, 1.01)	1.20 (0.95, 1.50)	0.86 ^{**} (0.77, 0.95)	1.07 (0.91, 1.27)
Total number non-sex partners	0.87 [*] (0.77, 0.98)	0.77 [*] (0.63, 0.96)	0.87 ^{**} (0.79, 0.96)	0.88 (0.75, 1.02)
<i>Individual</i>				
Live with parent or relative	2.21 [*] (1.16, 4.18)	1.89 (0.94, 3.79)	0.81 (0.47, 1.39)	0.78 (0.41, 1.49)
Use alcohol more than once per week	0.91 (0.44, 1.89)	1.27 (0.53, 3.08)	0.30 ^{***} (0.17, 0.54)	0.46 [*] (0.23, 0.90)
Use MA at least once per week	0.40 ^{**} (0.22, 0.75)	0.35 ^{**} (0.17, 0.73)	0.37 ^{***} (0.21, 0.64)	0.40 ^{**} (0.21, 0.77)

*
 $p < .05$

**
 $p < .01$

 $p < .001$