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RESEARCH NOTE

**Club Drugs and Sex on Drugs Are
Associated with Different Motivations for
Gay Circuit Party Attendance in Men**

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ABSTRACT

Data were collected from 1169 gay circuit party patrons in three North American circuit parties in three geographical locations in 1999. Questionnaires obtained reasons for attending circuit parties and drugs used at circuit parties. Factor analyses of the 10 major

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reasons for attending parties indicated that there were two significant moderately correlated dimensions: a social and celebratory one to be with friends and dance, and a sensation-seeking one, to have sex and drugs. Drug and sex on drugs predictors of the social dimension accounted for only 3.8% of its variance and included alcohol, ecstasy (methylenedioxymethamphetamine), GHB (γ -hydroxybutyrate), and having sex while on alcohol as significant predictors. Drug predictors for the sensation-seeking dimension accounted for four times the variance of the first dimension and included poppers, alcohol, ecstasy, Special K, and GHB, and having sex while on methamphetamines and on GHB. Unsafe sex was significantly associated with the sensation-seeking dimension but not the social dimension. While 63% checked ≥ 3 of the social reasons for attendance, only 13% checked ≥ 3 of the sensation-seeking reasons for attendance. Age was significantly inversely associated with the social dimension. These data suggest that while drug use is significantly associated with both the sensation-seeking and social dimensions of circuit party attendance, a greater number of drugs, sexual activity while on drugs, and unsafe sex are more closely associated with the sensation-seeking dimension of attendance.

Key Words: Circuit parties; Homosexual; Drug use; Attendance; Club drugs.

Club drug use has become an area of concern among gay men and men who have sex with men, where circuit parties may attract tens of thousands of patrons and where drug use and sex are not uncommon (Lewis and Ross, 1995; Mansergh et al., 2001; Mattison et al., 2001). Recent evidence suggests that a quarter of party attendees may have experienced a drug "overuse" incident in the previous year and have had unprotected anal sex (Mansergh et al., 2001), with a significant association between drug use and unsafe sex. Similarly, Mattison et al. (2001) found that use of ecstasy (MDMA), Special K (ketamine), crystal methamphetamine, GHB (γ -hydroxybutyrate), and poppers (volatile nitrites) were associated with unsafe sex, and that greater numbers of drugs taken were associated with higher risk. Mattison et al. (2001) also found an association between reasons for attending circuit parties and unsafe sex in the past year. They reported that attending parties to be uninhibited and wild, to have sex, and to look and feel good were all associated with unsafe sex. We sought to further understand the dimensions of and relationships between



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reasons for attending gay circuit parties in men and drug use in the present study.

METHODS

The authors collected data at three major gay circuit parties in North America in 1998–99, in diverse geographical areas of the country (see also Mattison et al., 2001). The estimated attendance of the three parties, all of which were held over holiday weekends, was respectively 25,000, 15,000, and 10,000. All data collection was undertaken with the active support of the party producers, and based on a two-page, 16-item questionnaire derived from 24 preliminary interviews with party patrons and previous research. It took on average 3 minutes to complete, and was distributed by patron volunteers approaching patrons with the questionnaire on a clipboard at several occasions over the 3-day circuit party events. These occasions included, at Party 1, in the line to the coat-check (the party was in the North during winter) on the first night; in a booth in the exhibition hall between 11 p.m. and 2 a.m. on the second night; and at the “morning after” party. At Party 2, patrons were approached during the beach party (this party was in the South) in daytime; at the hotel party ticket pick-up line; and from a table at the entrance to the late night party. At Party 3, patrons were approached in the line at the party hotel for ticket pick-up and poolside (this party was in the West) during the three days of the event. It was estimated that the refusal rate was between 1 and 5%; 15 uncompleted questionnaires discarded were from the 11 p.m.–2 a.m. data collection at Party 1, where some patrons were apparently chemically incapacitated. There was no incentive provided and if respondents were approached more than once, they indicated previous completion of the instrument. A total of 1169 usable questionnaires were obtained, which were entered into SPSSx for statistical analysis. The anonymous questionnaire sought information on demographics, reasons for party attendance, number of circuit parties attended, number of sexual partners, and drug use and unsafe sex both during and outside of circuit parties. Questions on party attendance are illustrated in Table 1, and were scored on a 4-point scale (strongly disagree, disagree, agree, strongly agree). Levels of reported club drug use at circuit parties in the last 12 months were sought for: alcohol, ecstasy, Special K, cocaine, crystal meth, GHB, marijuana, and poppers (never, sometimes, often), along with a measure of specific

**Table 1.** Factor structures of reasons for attending gay circuit parties.

Reason	Loadings	
	Factor 1	Factor 2
Factor 1: Social and celebratory reasons		
To celebrate, have fun	0.87	0.01
To be with friends	0.80	0.01
To dance, enjoy the music	0.73	0.16
To look and feel good	0.61	0.37
To escape	0.40	0.32
Factor 2: Sensation-seeking reasons		
To have sex	0.01	0.73
To be uninhibited and wild	0.27	0.70
To have an intense gay experience	0.28	0.64
To use party, use drugs	0.24	0.61
To forget about HIV/AIDS for a while	0.15	0.46

Factor 1, 26.28% of variance, $\alpha = 0.79$; Factor 2, 22.85% of variance, $\alpha = 0.67$.

unprotected anal sex *while using each of the substances at circuit parties* (yes, no).

ANALYSES

Data were analyzed using SPSSx 10.0. The ten reasons for circuit party attendance were factor analyzed [principal component analysis followed by varimax rotation (Kaiser normalization) to simple structure]. The two obtained dimensions were factor scored by multiplying the item score by the loading. Cronbach's α was calculated for each scale. The items for drugs used at the party, and whether unsafe sex had been engaged in for each drug, were input into two linear regression analyses (simultaneous entry method) in which the dependent variables were the first and second factor scales respectively (mean substitution was used for missing data in all analyses). Pearson correlation coefficients were computed between the factor scales and the demographic variables (age, income, education, and number of parties ever attended). Finally, factor scales were split at the median, and a chi-square test computed between the two dichotomized factor score groups and reports of engaging in unsafe sex. Significance was set at $p < 0.05$ for all tests. The study was reviewed by the relevant committee for the protection of human subjects.



RESULTS

Sample

Party patrons ranged in age from 18 to 60 years of age with the mean age being 33.5. The ethnic breakdown was 70% Caucasian (white, nonLatino), 10% Latino, 5% Black, 5% Asian, and 3% other: 68% of those surveyed had at least a Bachelor's degree and 50% earned $\geq \$50,000$ per year. Eighty percent of those interviewed were HIV negative, 13% HIV positive, 4% had been tested but didn't know the result, and 3% had never been tested. Half (50.7%) of the men surveyed were single with the remaining 49.3% having a partner or boyfriend. Of those in relationships, the average length was 2 years.

Drug Use

There was a high prevalence of drug use, with 79% reporting use of alcohol, ecstasy (72%), and Special K (60%) at parties in the past 12 months. Thirty-nine percent reported using cocaine, 36% crystal methamphetamine, 39% volatile nitrites, and 45% marijuana in the same time period: 28% had used GHB.

Reasons for Party Attendance

Reasons reported for circuit party attendance were (strongly agree), to celebrate, have fun 44.6%, to dance, enjoy music 41.8%, to be with friends 36.6%, to escape from usual day-to-day routines 26.7%, to look and feel good 24.8%, to have an intense gay experience 19.8%, to be wild and uninhibited 16.1%, to party, use drugs 10.9%, to have sex 6.2%, and to forget about HIV/AIDS 3.2%. Results are presented in Tables 1 and 2 and Fig. 1. Two 5-item factors were obtained for reasons for circuit party attendance with eigen values >1 , and confirmed by Scree Test: they accounted for 49.53% of obtained variance. The first factor described largely social and celebratory reasons (see friends, dance, celebrate) for attending circuit parties, while the second described sensation-seeking reasons (to have sex, a wild time, drugs) for attendance. In the regression analyses, the drugs used and sex on these drugs accounted for a small but significant amount of variance (adjusted $R^2=0.04$, $p<0.001$) for the social factor, and a larger amount of variance (adjusted $R^2=0.15$, $p<0.001$) for the sensation-seeking factor. The two factors were

**Table 2.** Predictors of reasons for attending gay circuit parties.

Variable	β	Significance
Social and celebratory reasons for attendance		
Alcohol use at party	0.112	0.001
Unprotected anal sex under influence of alcohol	0.066	0.07
Ecstasy use at party	0.098	0.03
GHB use at party	0.111	0.001
(Adjusted $R^2 = 0.038$)		
Sensation-seeking reasons for attendance		
Alcohol use	0.107	0.02
Ecstasy use	0.259	0.001
Special K use	0.116	0.08
Unprotected anal sex under the influence		
of methamphetamines.	0.125	0.08
GHB use	0.095	0.08
Unprotected anal sex under the influence of GHB	0.192	0.03
Popper use	0.085	0.09
(Adjusted $R^2 = 0.150$)		

correlated 0.42, $p < 0.001$, and the social factor was correlated with age, -0.14 , $p < 0.001$. There was a significant relationship between the dichotomized factor scores for sensation-seeking reasons (but not social reasons) and reported unsafe sex in the past year, $\chi^2 = 13.24$, $df = 1$, $p < 0.001$. There was no significant relationship between either of the factors and number of parties ever attended. Listing the important reasons for attending by factor, where the maximum score was five, are reported by frequency in Fig. 1. For 62.9% of the population three or more social reasons were given, and for only 13.2%, three sensation-seeking reasons.

DISCUSSION

These data should be interpreted with several caveats. This was a nonrandom sample of convenience and it was not possible to discern an association between drug use and unsafe sex *at the party*, because data were not available for unsafe sex *at circuit parties* in nondrug users. However, these data *were* available for unsafe sex in the past 12 months and provide a crude index of risk. Our conservative measure of unsafe sex may underestimate risk, but because we were not able to separate out risky behavior in mutually monogamous and HIV-seroconcordant



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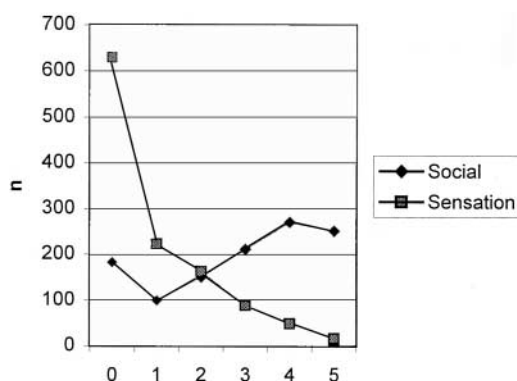


Figure 1. Frequency of attendance reasons by factor.

relationships, this may conversely bias toward overestimation. We are not able to estimate whether the voluntary, nonrandom nature of this survey may have led to any bias toward, or against, drug use in the sample.

These data indicate that reasons for gay circuit party attendance comprise two major dimensions: attendance for largely social reasons, and attendance for largely sensation-seeking reasons. These reasons share 17.6% of variance in common, and have acceptably high Cronbach's α , indicating their appropriateness for use as scales in future research on this population.

The regression analysis indicates that for social reasons for attendance, significant predictors (accounting for only 3.8% of variance) were alcohol, ecstasy, and GHB use, and having sex while using alcohol. The low amount of variance accounted for suggests that drug use and sex are not associated with social reasons for circuit party attendance in any major way. Younger respondents were significantly more likely to report social reasons for attendance.

However, for the sensation-seeking reasons for attendance, 15% of variance was accounted for by use of alcohol, ecstasy, Special K, GHB, and poppers, and by having sex while on methamphetamines and GHB. These data suggest that those who attend for largely sensation-seeking reasons are more likely to have used multiple drugs and to have reported sex on club drugs. Further, they are more likely to report unsafe sex over the past year. These findings are consistent with Ostrow and McKirnan's (1997) escape model of drug use in MSMs. Ostrow (2000) argues that drug use may facilitate unsafe sexual behaviors by decreasing both anxiety and self-observation, which may otherwise inhibit pleasurable sexual experiences, and by providing a "scripted" release from internal, social,



and peer group norms, thus resulting in more automatic behaviors which are more rewarding because awareness of their consequences is diminished.

The proportions of those checking social and sensation-seeking reasons in Fig. 1 illustrate that a huge majority attend for primarily social reasons. However, about one in eight appear to attend for primarily sensation-seeking reasons. These data, while based on an arbitrary cut of a majority (≥ 3) of reasons in each factor, do illustrate that those who are likely to be at risk in terms of sexual or drug-related behavior are a small minority. These data are also consistent with the findings of Mattison et al. (2001) that around only 15% of circuit party attendees had unsafe sex in the past year. Better understanding of the characteristics of this small group of those who are likely to be at risk, rather than all those attending circuit parties, should be a goal of future research.

These data suggest first, that reasons for attendance fall into two reliable dimensions that can constitute scales. Second, they suggest that levels of risk in gay circuit parties are a function of reasons for attendance, and that any interventions that seek to reduce drug-related or sexual risk in these venues must be targeted differently. These data also suggest that targeting the small proportion of attendees who are attending specifically for reasons relating to sensation-seeking, including drug use and sexual contact, should be a priority and that qualitative research in this area is needed to expand these quantitative data.

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REFERENCES

- Lewis, L. A., Ross, M. W. (1995). *A Select Body: The Gay Dance Party Subculture and the HIV/AIDS Pandemic*. London: Cassell.
- Mattison, A. M., Ross, M. W., Wolfson, T., Franklin, D., HNRC Group. (2001). Circuit party attendance, club drug use, and unsafe sex in gay men. *Journal of Substance Abuse* 13:119–126.
- Mansergh, G., Colfax, G. N., Marks, G., Rader, M., Guzman, R., Buchbinder, S. (2001). The circuit party men's health survey: findings and implications for gay and bisexual men. *American Journal of Public Health* 91:953–958.



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- Ostrow, D. G., McKirnan, D. (1997). Prevention of substance-related high-risk sexual behavior among gay men: critical review of the literature and proposed harm reduction approach. *Journal of the Gay and Lesbian Medical Association* 1:97–110.
- Ostrow, D. G. (2000). The role of drugs in the sexual lives of men who have sex with men: continuing barriers to researching this question. *AIDS and Behavior* 4:205–219.

RESUMEN

Los datos fueron recogidos en 1999 de parte de 1169 patrocinadores homosexuales (gay) de fiestas circuitas en tres fiestas circuitas Norteamericanas, dentro de tres locales geográficos. Los cuestionarios obtuvieron información sobre los motivos por asistir a las fiestas circuitas, así como el tipo de droga utilizada en las fiestas circuitas. Los análisis de factor de los diez principales motivos por asistir a las fiestas indican dos moderadamente significante dimensiones relacionadas: una la celebración social para estar con amistades y bailar, y una en busca de sensaciones para obtener sexo y drogas. La droga y el sexo en predicciones de drogas en la dimensión social explican sólo el 3.8% de su discrepancia e incluyen alcohol, ecstasy (methylenedioxymethamphetamine), GHB ((gamma)-hydroxybutyrate), tener sexo bajo el uso de alcohol sin predicción significante. Predicciones de drogas para la dimensión en busca de sensaciones explica cuatro (4) veces la discrepancia de la primera dimensión e incluyen poppers, alcohol, ecstasy, Special K, y GHB, y tener sexo cuando bajo la influencia de metanfetaminas y GHB. Tener el sexo sin protección era asociado como significante con la busca de sensaciones pero no con la dimensión social. Mientras el 63% indico (el signo más que o equivalente a) tres de los motivos en busca de sensaciones como motivo por asistir. La edad fue significante como inverso asociado con ambos la busca de sensaciones y las dimensiones sociales de la participación en las fiestas circuitas, un mayor número de drogas, actividad sexual, y sexo sin protección son más bien asociados con participación por motivo de la dimensión en busca de sensaciones.

RÉSUMÉ

Des données ont été recueillies concernant 1169 patrons homosexuels («gay») clients de trois groupes Nord-Américains de soirées-rencontres organisées homosexuelles situées dans trois endroits géographiques en



1999. Les questionnaires ont obtenu des informations sur les raisons pour lesquelles ces personnes se rendaient à ces soirées-rencontres et sur les drogues qui y sont consommées. L'analyse factorielle des 10 raisons principales pour se rendre à ces soirées-rencontres a montré qu'il y avait deux aspects modérément corrélés de façon significative: l'aspect festoyant social permettant d'être avec des amis et de danser/danse, et l'aspect goût du risque à la recherche de rapports sexuels et de drogues. Drogue et rapports sexuels prédisent l'usage de drogues ne représentent que 3.8% de la variabilité de la dimension sociale, incluant comme variables significatives alcool, les drogues 'ecstasy' (méthylenedioxy-méthamphétamine) et GHB ((gamma)-hydroxybutyrate), et les rapports sexuels prédisent l'usage d'alcool. Les prédisent l'usage de drogue pour la dimension goût du risque expliquent quatre fois plus de variabilité que nous ne pouvions expliquer pour la dimension festoyante-sociale, incluant 'poppers', alcool, 'ecstasy', K-spécial et GHB, ainsi qu'avoir des rapports sexuels sous l'effet sur des méthamphétamines et du GHB. Les rapports sexuels risqués étaient liés de façon significative à la dimension goût du risque mais pas à la dimension sociale. Tandis que 63% indiquaient au moins 3 raisons sociales pour se rendre à ces rencontres, seulement 13% indiquaient au moins 3 raisons de la dimension goût du risque pour assurer s'y rendre. L'âge était inversement associé, de façon significative, à la dimension sociale. Ces données suggèrent que, tandis que l'utilisation de drogues est sensiblement associée aux deux aspects, tant goût du risque que social pour se rendre à ces soirées-rencontres organisées, un plus grand nombre de drogues, l'activité sexuelle sous l'effet des drogues et les relations sexuelles risquées sont plus étroitement associés à la dimension goût du risque pour se rendre à ces rencontres.

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