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Making Informed Decisions: How Attitudes and Perceptions Affect the Use of Crystal, Cocaine and Ecstasy among Young Men who Have Sex with Men

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Abstract

Although the use of illicit substances, particularly those commonly categorized as “club drugs”, among men who have sex with men (MSM), is well established in the literature, little is known about the decision making process that is used in deciding whether or not to use a particular substance. In this study, we examine the positive and negative attitudes and perceptions among young men who have sex with men (YMSM) in regards to three specific drugs: crystal methamphetamine, cocaine and ecstasy. The findings reported here emerged from the baseline quantitative interviews and an accompanying qualitative phase of the Healthy Young Men’s study (HYM), a longitudinal study examining risk and protective factors for substance use and sexual risk among an ethnically diverse sample of YMSM. Findings are discussed in relation to framing how service providers and others can design new and innovative interventions to prevent young men from initiating substance use.

Introduction

In recent years, a great deal of research has been focused on “club drugs” and the different groups of people who commonly use them (Agar & Reisinger, 2004; Clatts, Goldsamt & Yi, 2005; Fernandez et al., 2005; Halkitis, Greem & Mourgues, 2005; Hunt, Evans, Wu, & Reyes, 2005; Kelly, 2005; Kipke et al., 2007; Krebs & Steffey, 2005; McDowell, 2000; Miller, Furr-Holden, Voas & Bright, 2005). Club drugs are so named based on the environment in which they are thought to be primarily used (Krebs & Steffey, 2005) most commonly dance clubs, raves and circuit parties. Particular attention has been paid to men who have sex with men (MSM) and their use of club drugs due to the documented connection between these drugs and high-risk sexual practices as an increasing contributor to HIV infection rates in this population (Halkitis, Parsons & Stirratt, 2001; Klitzman, Pope & Hudson, 2000; Ostrow, 2000; Stall & Purcell, 2000; Waldo, McFarland, Katz, MacKellar & Valleroy, 2000). Prior research has found high rates of drug use among MSM (McKirnan, Ostrow & Hope, 1996), often citing how clubs and the related “scene”, which have been a primary social space for the gay community to congregate, facilitate and/or sanction drug and alcohol use (Halkitis & Parsons, 2002). However, much of the prior research with this population has focused on older MSM. Data describing young men who have sex with men’s (YMSM) use of drugs and the attitudes and perceptions they hold has not been adequately explored. In this paper, we seek to explore

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some of the attitudes and perceptions of three different drugs: crystal, ecstasy and cocaine (which are often classified as club drugs among a sample of YMSM).

Past research indicates that YMSM may be at increased risk for substance use, in particular the use of drugs, relative to their heterosexual peers (Wolitski, Valdiserri, Denning & Levine, 2001). Late adolescence and early adulthood is developmentally a period during which young people often experiment with behaviors that expose them to increased risk (e.g., drug use and sexually risky behaviors). During this time, termed “emerging adulthood”, young people begin to explore new roles and relationships; establish more intimate attachments and sexual relationships with both male and female peers; and begin to define their sexual identity, both privately and publicly (Arnett, 2000). For YMSM in urban environments, it is also a time when they begin to seek out and spend time in gay-identified venues, of which the majority are bars and clubs where they may be introduced to drugs, including “club drugs” (Rosario, Schrimshaw, Hunter, 2004).

Recent research has shown that among YMSM, crystal, cocaine and ecstasy are among the most commonly used drugs (Clatts, Goldsamt & Yi, 2005; Kipke et al., 2007) and each has been associated with high-risk sexual behavior within this population (Hirschfield, Remien, Humberston, Walavalkar & Chiasson, 2004; Klitzman, Greenberg, Pollack & Dolezal, 2002; McNall & Remefedi, 1999; Waldo, McFarland, Katz, MacKellar & Valleroy, 2000). Crystal has been documented to be particularly common among MSM due in part to its psychological and physiological effects which heighten the senses, giving the user increased energy and confidence, lowered sexual inhibitions and can result in hyper-sexuality and enhanced or prolonged states of sexual arousal (Diaz, Heckert & Sánchez, 2005; Guss, 2000; Murray, 1998; Reback, 1997; Semple, Patterson, & Grant, 2002). Several researchers have described some of the reasons that MSM use crystal as being related most often to enhancing sexual sensation and behavior (Halkitis, Fischgrund & Parsons, 2005), followed by increasing socialization in social gatherings, improving emotional well being, coping with stress, and behavioral changes such as weight loss and increased productivity related to increased energy (Diaz et al, 2005). However, once the feelings of euphoria and energy diminish, crystal can cause severe depression (Halkitis, Parsons & Wilton, 2003) and has been shown to be highly addictive (Yoshida, 1997).

MDMA, generally referred to as “ecstasy”, is most commonly connected to the rave scene (Sterk, Theall & Elifson, 2006) and is often described as being taken in groups while at social gatherings (Panagopoulos & Ricciardelli, 2005), creating an opportunity of “self-discovery” for users (Hunt, Evans, Wu, & Reyes, 2005), inducing a state of euphoria and creating a greater sense of community among users (Levy, O’Grady, Wish & Arria, 2005; Sterk et al., 2006). Much of the existing behavioral research focused on its use has explored the relationship between ecstasy and sexual activity, and increased sociability as a result of use (Klitzman, Pope, & Hudson, 2000; McElrath, 2005; Novoa, Ompad, Wu, Vlahov & Galea, 2005).

Within this population, less research has been conducted on cocaine use, though limited research suggests that it may be more common among MSM than heterosexual populations (Bux, 1996; Cochran, Ackerman, Mays & Ross, 2004; McKirnan & Peterson, 1989). Cocaine has also been associated with poorer intimate partner relationships among MSM in such areas as lower levels of affection, satisfaction, cohesion, equality and interpersonal relations (Dolezal, Remien, Wagner, Carballo-Dieguez & Hung, 2005) as well as HIV seroconversion (Chesney, Barrett & Stall, 1998; McNall & Remafedi, 1999).

Because of the social and health consequences attached to substance use, it is important to understand and explore the attitudes that may lead YMSM to choose to use drugs, as well as some of the reasons why some drugs may be less appealing. Various etiological theories of

substance use have been developed, such as the influence of setting, environment and social circumstances on drug use behavior (Elliot, Huizinge, & Ageton, 1985; Zinberg, 1984) and more recently, active decision-making where individuals consider the potential outcomes of drug use (Ajzen, 1985). While reasons for use of different club drugs have been described, research is lacking in understanding how different drugs are perceived, or the associated positives and negatives attached to those perceptions. Likewise, due to their connection to high-risk sexual activity, much of the research has focused on decisions based on sexual desires. Many factors are weighed in deciding whether or not to engage in an activity that may be perceived as risky. For example, the Theory of Reasoned Action asserts that social and cultural norms, setting and context, the effect related to the behavior and the values attached to the perceived outcomes of the behavior all play a role in determining intentions to initiate new behavior (Ajzen & Fishbein, 2005).

By exploring how these different constructs interact, we provide descriptions of attitudes and perceptions of these three drugs among a sub-sample of YMSM from the Healthy Young Men (HYM) study in Los Angeles. Building on a prior analysis of quantitative data (Kipke, et al., 2007), this paper will explore how these experiences and perceptions may influence YMSM's decision to use cocaine, crystal and/or ecstasy. Qualitative techniques were used to elicit a greater depth of understanding regarding the often complex choices YMSM make related to drugs and drug use. Data presented in this paper include descriptive quantitative findings from the full sample of 526 ethnically diverse YMSM but primarily focus on qualitative data from a subgroup (n=24) of that sample. Quantitative data are presented to provide an overview of drug use behaviors within this group of YMSM while the qualitative data provide a greater depth of understanding behind some of those behaviors, focusing specifically on their attitudes and perceptions of drugs and drug use.

Methods

Quantitative Study

Between February 2005 and January 2006, a total of 526 young men were recruited into the HYM Study, a two-year longitudinal study of a cohort of ethnically diverse YMSM in Los Angeles. Young men were eligible to participate in the study if they were: a) 18- to 24-years old; b) self-identified as gay, bisexual, or uncertain about their sexual orientation and/or reported having had sex with a man; c) self-identified as Caucasian, African American, or Latino of Mexican descent; and d) a resident of Los Angeles County and they anticipated living in Los Angeles for at least six months.

Young men were recruited at public venues (e.g., bars, clubs, social service agencies, gay pride festivals) using the stratified probability sampling design developed by the Young Men's Study (MacKellar, Valleroy, Karon, Lemp & Janssen, 1996) and later modified by the Community Intervention Trials for Youth study (Muhib et al., 2001). Additional descriptions of the sampling procedures and methodologies are described in other publications (Kipke et al., 2007).

HYM participants completed an extensive 1 to 1 1/2 hour baseline interview and over the course of two years will complete four follow-up interviews administered at six-month intervals. The surveys are administered in both English and Spanish using audio computer-assisted self-interviewing (ACASI) technologies. ACASI technologies have been found to improve both the quality of the data and the validity of responses, particularly to questions of a sensitive nature, such as drug use and sexual behavior (Kissinger et al., 1999; Ross, Tikkanen & Mansoon, 2000; Turner, Ku, Rogers, Lindberg, Pleck, & Sonenstein, 1998).

HYM Survey Measures

Demographic variables—Participants were asked to report their age; race/ethnicity; place of birth; immigration status; employment status; their sexual identity and whether they are attending school.

Drug use—Participants were asked if they had ever used and more recently (i.e., past 3 months) used alcohol, marijuana, crack, cocaine, crystal, ecstasy, poppers, GHB, Ketamine, and “other forms of speed”, LSD, PCP, heroin, mushrooms, and prescription drugs without a physician’s order. Club drugs were operationalized to include: ecstasy, crystal, cocaine, poppers, GHB, Ketamine and other forms of speed (Kipke et al., 2007). They were also asked if they had ever engaged in injection drug use (IDU).

Qualitative Sub-Study

In addition to the longitudinal study, a smaller, targeted group of 24 respondents was chosen from the larger HYM cohort for semi-structured qualitative interviews designed to provide context to key study domains such as drug use and sexual behavior. All of the qualitative interviews were completed from June – July 2006. Individuals selected for this sub-study were selected based on responses to key items in waves 1 and 2 of the quantitative survey. Specifically, half (n=12) of the qualitative respondents reported that they had used at least one drug other than marijuana in the last 30 days in both wave 1 and wave 2. These selection criteria were used to approximate more consistent usage of illicit drugs rather than individuals who may have experimented or had minimal use of an illicit substance. The other half (n=12) of the respondents (“non-users”) were those who reported no lifetime use of any drug (excluding alcohol). “Non-users” were each interviewed once and those categorized as “users” completed two interviews to obtain further details on the context and setting of actual drug use. Those respondents who met the criteria to be classified as either a “user” or “non-user” were separated from the larger sample and respondents were randomly chosen from this subset. The respondents were selected in this way to gather information from both users and non-users who frequent the same social venues about their positive and negative attitudes and perceptions of different kinds of drugs.

The interview discussion guides used in this phase of the HYM Study were designed to gather in-depth information on a variety of constructs such as: perceptions of drugs and those who use them; how respondents received and reciprocated social support from friends; family history of substance use; as well as strategies used for coping with stressful events. Respondents categorized as “users” were also asked questions regarding their drug use history; any negative experiences they had had while using drugs; their favorite drug and related contextual information; and experiences related to using drugs before or while having sex. Specific to this current study, responses from several sets of questions related to the positives and negatives of drug use, personal experiences and preferences regarding drugs, and thoughts about specific drugs (e.g., marijuana, cocaine, heroin, crack, crystal, prescription drugs) and the people who use them were included for analysis. Each interview lasted an hour to 1 ½ hours and was digitally recorded and professionally transcribed. All interviews were conducted in the HYM project offices or at a location convenient to the respondent (e.g., coffee house or park). Respondents were provided a \$35 incentive for completing each interview. The research received approval from the Institutional Review Board of Childrens Hospital Los Angeles.

Analysis

Quantitative Analysis

All statistical analyses were conducted using SPSS version 13.0. Because the current study is largely descriptive, results presented are based on univariate analyses of key variables of

interest. Results from frequency analyses characterized key demographics (e.g., age, ethnicity, employment) of the study sample.

Qualitative Analysis

The qualitative analysis for this study was based on grounded theory, which entails the simultaneous process of data collection, analysis and theory construction (Glaser, 1992; Glaser & Strauss, 1967). As the data are collected, they are immediately analyzed for patterns and themes, with the primary objective of discovering theory that is implicit in the data. Atlas.ti, a software developed for qualitative data analysis, was used for the coding and analysis of relationships between and within text segments.

Members of the research team reviewed an initial sample of interviews to identify key themes, which formed the basis of the project codebook. Codes focusing on a range of topics were identified and defined based on the key constructs included in the discussion guides. The codebook was modified as needed and once finalized, four members of the research team were responsible for coding the interviews. Inter-coder reliability was assessed through double coding a sample of approximately 20% of the interviews. Differences in coding were discussed and resolved by the team. After the initial coding phase, the open coding process began, allowing for constructs of interest to be identified and labeled. For this study, codes related to positive, negative and neutral associations of drugs and drug use (e.g., increase in energy level, improved social relations and negative effects on health and personal relationships), as well as the contextual elements of drug use (e.g., where, with whom, related activities) were included in the analysis. This open coding process included refining the codes based on data and actual descriptions of drugs and related experiences. During this phase, cocaine, crystal and ecstasy emerged as the club drugs most commonly described in the interviews. Finally, categories were developed to describe the different attitudes and perceptions respondents held regarding drugs and the context and settings where they were commonly used. Throughout this paper, pseudonyms are used to identify respondents while protecting their confidentiality.

Findings

Quantitative

Table 1 presents the demographic data for the full sample of HYM respondents and those who reported lifetime use of one or more club drugs. Club drug users do not differ considerably from the rest of the sample. However, a larger proportion of club drug users reported being employed but not enrolled in school, compared to the percentage of the total sample reporting both working and attending school.

The majority of the total HYM sample (74%) identified as gay, with 16% identifying as bisexual. About half of the sample reported a drug or alcohol problem in their family, with a slightly larger proportion (58%) of club drug users reporting family drug and alcohol histories. Reports of ever having been homeless were similar among drug using participants and the overall sample, i.e., 10% and 9%, respectively.

Table 2 presents the data from the baseline survey on the total sample's lifetime and recent (past three months) substance use. These data reveal that most HYM respondents who report drug use are initiating use of club drugs such as cocaine, crystal and ecstasy during their late adolescence or early adulthood, with a mean of 18.3 years. In addition, apart from marijuana, the most commonly used illicit drugs include cocaine (24%), crystal (20%) and ecstasy (22%), and prescription drugs (26%) – with anti-anxiety (e.g., valium, xanax) the most common at 14%. A smaller proportion of respondents used other drugs such as heroin, crack, LSD, PCP and mushrooms.

Qualitative

Context and Setting of Club Drug Use—Drawing on Zinberg's work (1984), setting for drug use includes not only the physical surroundings where a drug is used but also the social context and network of people who are involved. Analyses of the qualitative data revealed that participants who used club drugs used them in a range of different contexts, and commonly had individual preferences regarding where and under what circumstances they used them. The most common locations respondents reported for using drugs were at home, in cars, at clubs, raves and parties. In most situations, these three drugs were used with friends or in settings with a group of people.

Interestingly, and in contrast with findings from other research, these youth rarely spoke of using crystal at clubs. Rather, crystal was typically described as a drug used in the context of private homes, alone or with friends. Some non-users described crystal as a "party drug" that they would expect would be used at clubs, raves or house parties. Cocaine was also a drug that some respondents seemed to prefer using at home or at private parties with friends. In some cases the reason for preferring to use a drug in a specific place or environment was directly related to the experiences (e.g., dancing, alleviation of social anxiety, relaxation) associated with a particular drug:

I think that if you're going out and you're gonna be moving around and having a good time and there's gonna be really funky music and whatnot, I think probably ecstasy as opposed to crystal meth. Crystal meth is more if you just wanna sit around with a couple of your friends and just talk and reminisce and think about the past or talk about the future whatnot.

In other cases, drugs were used at home out of a desire to maintain discretion:

I think coke is better done in a house or in a place where you can just chill. Because doing it out where you have to be active makes it a little bit more suspicious. It makes it more dangerous and you're vulnerable to other people knowing or seeing or being caught. I just feel more comfortable doing it in an environment I know. I can just have it there, I can chill there, don't have to worry about anyone coming in, don't have to worry about people fucking up my high or anything.

Another frequent location of crystal use was in the car. In some instances respondents reported using crystal in their cars en route to a party. Others reported that they remained in the car throughout the period of time they were high. This choice of location appears to be based somewhat on convenience and availability and speaks to crystal's quality of being a drug that is often used "in the moment". One respondent described how he and his friends, not wanting to change activities and their environment after smoking crystal, would drive for the duration of their high, which lasted several hours:

I would hook up with...some friends and it seemed like [friend A] always had it. So it was like when you pick up [friend b], you know, before you go to get your next friend, you're smoking crystal in the car and you go and pick up the next person and the next person and so on, and sometime we would go out to bars and clubs and whatnot, and sometimes we would just drive, and drive, like it felt like we would drive 'till the wheels fell off the car. With no destination. Because it kind of felt like whatever you did while you got high is what you felt like doing.

Unlike crystal and cocaine, and consistent with other research findings, ecstasy use seemed to occur most frequently at clubs and in Rave contexts. Respondents seemed to have an almost taken-for-granted, association between ecstasy use and Raves. Brian, who first used ecstasy at a Rave when he was 19 years old, described how he procures ecstasy at a Rave. In the quote

that follows, he describes the context of his first experience using cocaine and in so doing implies that ecstasy use and Raves seem to go hand-in-hand.

They [participant's friends] called me at random. And like, 'Hey, there's a rave not that far from you.' In the Los Angeles Forest actually. Turned out to be 2,300 people in the Los Angeles Forest. ABSOLUTELY incredible. We did double stack brown maple leafs [ecstasy]...First person that had them, sure. At a good price? Yeah. Most definitely.

During the Rave, he [friend] had asked to borrow some money for a bag of cocaine. And I'm like, 'OK, only if I can try some.' And it was OK, but I was also on ecstasy at the time because it was a Rave.

Attitudes, Beliefs and Concerns About Drugs—One of the most striking differences between users and non-users in their attitudes regarding drug use was the general lack of information among non-users of drugs in general. Many non-users had heard of the drugs in question, but could not describe their particular characteristics or effects. Non-users typically said that their friends did not use illicit substances and that they rarely interacted with drug users in general. Due to this lack of specificity regarding use of particular drugs, non-users typically made more broad statements about drug use, with some drawing on family members' experiences with drugs and others more generalized reasons, such as Vincent who based much of his anti-drug stance on his spirituality.

There's nothin' positive about drugs because we are a VERY spiritual group and basically, doin' drugs is like letting the devil take over your mind. And we don't play that. So there's really nothing positive about it. There ain't nothin' positive about the devil to us.

Vincent illustrates one of the findings from a prior analysis within the HYM Study (Kipke et al., 2007), which found that those reporting higher levels of religiosity were less likely to use club drugs.

Data revealed a discrepancy with regard to crystal use. While crystal use was viewed as being acceptable within the gay community, respondents also perceived that many users, commonly referred to as "tweakers", tried to hide their use to avoid social rejection. Both users and non-users of the drug shared a strongly negative view of crystal, describing it as "a horrible drug" and "gross". In some cases, the social disapproval surrounding crystal did not seem to prevent use, but rather created a sense of taboo that may be one aspect of the drug's appeal. Albert, a respondent who held a very negative opinion of crystal use, later added that the social stigma attached to this drug was one of the reasons he had tried it twice.

It's like breaking the speed limit, I guess... You know everyone wouldn't want you to do it, but you do it anyway, like all your friends wouldn't want you to be on it...I guess it'll be more of a thrill if you like have sex with someone you don't know with it, and you just feel like so bad...And that's why [speed] is so different, like because it's bad.

Crystal among this group of respondents had considerable negative connotations. In contrast, cocaine was somewhat glamorized, and viewed as a drug often linked to fashionable people (e.g., Kate Moss) or places, including exclusive nightclubs, celebrities and the fashion industry. Non-users in particular seemed to contrast cocaine and crack, noting that cocaine was a drug for the privileged while crack was perceived to be a part of a more impoverished, often urban community. This sense of glamour attached to cocaine also contributed to the more positive assessment of the drug as it was seen as something that may add a sense of prestige to the user due to associations with Hollywood and other attractive images.

Party people. I don't know, glamorous, going out, fixed up, trying to hook up with someone...People that like to go out, people that like to dance, stay out late, get fixed up. Fix their hair, get all nicely dressed and like to have a good time. I guess the 80's made it glamorous! I don't know, it's just the fact, even the name sounds kind of glamorous - cocaine.

Most respondents perceived ecstasy differently than cocaine and crystal. In general, both users and non-users tended to believe that ecstasy was a less harmful drug, and that one cannot become addicted to it. In addition, ecstasy was not a drug that respondents described as using alone. Rather, it was described as a social or community drug that was taken with friends for an evening out at a club, party or Rave. Will, a cocaine and crystal user who has never used ecstasy, described his reasons for wanting to try it as:

...like you're just really mellow, low key and I don't know, it just kinda puts you in a really friendly mood and I don't know, it sounds kinda fun so I thought I'd try it. But I don't know. I haven't really found like the perfect situation...if I was amongst friends and maybe if I went to like a Rave or something like that or I was out, it would be kind of fun to try.

Interestingly, while cocaine is the more commonly used drug among HYM respondents, qualitative respondents spoke most often (and sometimes at great length) of crystal and its effects, both positive and negative. Many of their perceptions of these drugs were based on norms within their social networks or their personal and/or their friends' experiences with a particular drug. The most salient themes present in the narratives and reported here relate to *Energy Enhancement, Sexual Behavior and Sensuality, Impact on Social Relations, Emotional Aspects of Drug Uses, and Physical Health/Body Image*.

Energy Enhancement—The most common positive associations respondents described, with crystal in particular, included the energy boost these drugs provide. Respondents reported that crystal would help people to get things done, specifically mentioning household chores, studying, creative outlets and the ability to fully concentrate on whatever they wanted to do, as one respondent described, “*whether it be an art project, redesign a room, paint, whatever I wanted to do in that period*”. The initial energy boost derived from crystal was described by one respondent as a “kick start”, enabling him to get moving and forget about any feelings of lethargy he may have had. Non-users, too, commented on this aspect of crystal use, noting that it was something that would likely improve concentration and something college students might use to stay up late to study. One user respondent described his attraction to the drug as:

In my book, this is the attraction, that you do two hits of it and you get this really cool burst, like it feels like you're in a racecar and you're in shotgun and all of a sudden he just drops that clutch and then you just take off. Like you get pulled back and you go so fast. Like a roller coaster. Which is good, and it's an attractive drug in the beginning.

Though also classified as a stimulant, cocaine was not as commonly cited as giving a user an energy boost. However, respondents who used cocaine sometimes described it as helpful for focusing at work:

I've done it [cocaine] at work. I kind of focus more...it makes me get through the day. A long day that I really don't want to do. It makes it enjoyable.

One respondent explained that he only used cocaine when he needed to get something done, and the few times he had used it without a project in mind he described as “bothersome” because he and his friends just “*sat down and like began doing a bunch of coke. We weren't trying to accomplish anything.*”

More common among users was the somewhat negative association with cocaine that the resulting high was minimal and not necessarily worth the monetary expense attached to cocaine. In contrast, while some non-users too also had the impression that cocaine's effects were brief, they tended to see this as a positive aspect. As Zach noted, *I don't think it's [cocaine] that bad of a drug...Cause it's not like crystal when you're out there tweakin' and you're staying up for four days...it comes and goes*. When describing their negative associations with crystal, respondents tended to speak of sleep deprivation and the resulting exhaustion from prolonged binges.

This was more common among youth with work or school responsibilities.

After the drug [meth] would wear off, yeah, I would go to sleep and wake up and, the only thing with that of course, is you are taking away from...your sleep time. So you're gonna have the side effects. So when you wake up and having to go back to work the next day, you're gonna be pretty much tired.

Few respondents discussed ecstasy as a drug that enhances energy or focus. Some maintained that a drawback to ecstasy is the prolonged length of the high and the time it takes to recover afterwards.

Sexual Behavior and Sensuality—Due to the prevalence of data that emphasizes the link between sex and crystal use, it was expected that HYM respondents would include enhanced sexual activity as a positive association of crystal use. While this was true, as some HYM respondents stated that crystal use enhanced or prolonged sex, at times resulting in a sexual encounter that lasted several hours, a nearly equal number of respondents maintained that crystal diminished the quality of the sexual encounter. Interestingly, in spite of the increasingly ubiquitous substance abuse materials disseminated to gay venues on the sexual risks related to crystal use, non-users did not generally comment on the connection between crystal and sexual experiences. Both positive and negative views of crystal's effects on sex were shared by Mario, whose early experiences combining crystal and sex were mainly pleasurable.

Hitting glass is equivalent to the feelings that you get when you orgasm. So it's just basically combining the two. I guess that's how I can explain it. It elevates it. More endorphins I guess in the head or something like that.

Mario described how in his earlier adolescence, he typically used crystal during sex, especially with partners he met online for single encounters, as a strategy to help him relax and alleviate anxieties associated with having sex with someone he did not really know. However, he was far more circumspect about using crystal recently during sex with a young man with whom he hoped to have a more lasting relationship, feeling that the drug interfered with his sexual performance and establishing an emotional attachment.

And when I first met, it was like maybe the third or fourth night that I spent over at his house and I was on it, not only could I not perform as I wanted to sexually with him, because I was racing...or I just wasn't really interested in it. Or even when you're on it, you couldn't get it up like you wanted to or you couldn't perform like you wanted to. That was another impact that I was like 'I'm gonna get away from this [meth] cause I like this guy and I want to make him happy too.'

Other respondents discussed pressure to use crystal if their sexual partners partner pushes them to use the drug. One respondent revealed that his boyfriend had a pattern of giving him crystal prior to having sex, he described his partner's behavior as "premeditated" and detrimental to their relationship. Another respondent, David, shared his struggle when his partner pushed him to use crystal, describing a conflict between his wanting to avoid the temptation, but ultimately acquiescing to avoid a fight.

Like last time, I told him I didn't want to do it, but I didn't want us to get into a fight. So, I chose to give him what he wanted...I just made that choice to do that. I didn't want to but then he throws it in front of me and I wanted to. If it's in front of me, I want to cause I get tempted.

Cocaine was not mentioned at all in reference to sex. However, some described ecstasy as enhancing their sensuality in general, in both sexual and non-sexual situations. Consistent with past studies with young ecstasy users, (Boeri, Sterk & Elifson, 2004; Theall, Elifson & Sterk, 2006) ecstasy was described as a bonding drug, often leading to affectionate physical contact such as cuddling, hugging or touching.

Sex with ecstasy, it's kind of like well...it's kind of like having sex when you're drunk. You just feel more relaxed. You feel everything's a little more sensitive. Just like the touch or the kiss. It seems like it's more passionate. It kind of seems like you're in a sleazy romance novel.

In non-sexual situations as well, respondents described a general enhancement of their senses, where they would get caught up in the environment that often included reverberating music, colored lights and crowds of dancing people, all of which were described as being intensified when on ecstasy.

It makes everything you touch feel really, really good. Not in a sexual way, but I don't know, maybe like a massage. Like everything feels like a massage and if you touch the wall, it feels like, it feels like the wall is stimulating you or if you touch someone's clothes, it feels like, that feels really, really good.

Impact on Social Relationships—Respondents also discussed how drug use affected social relationships with friends, partners or family members. Non-users most often spoke of this impact negatively, in general terms as Walt describes, *I think people, a lot of times don't understand that your actions and the consequences from that don't only affect you...It hurts people around you, you know, loved ones*. Interestingly, participants appear to believe that people's reactions to learning of one's crystal use would be far more detrimental to their relationships than other drugs such as cocaine or ecstasy. For example, several respondents mentioned that people often become habitual liars about their crystal use to friends and family and others often mentioned having to hide some of the telltale signs of crystal use such as the "blank stare" typical of users or the distinctive smell of the drug.

It has a smell like even if you like take a shower you can still smell it on them. It like comes out of your pores, it's like so bad...I will never, ever forget that smell, like. Like, I'm like, "That's speed." ...It smells like, what does it smell like? Like ammonia, but it's like just distinctive.

Respondents who used crystal, worried about family members, coworkers or friends finding out they were using, as one respondent described, *"People might reject you because you're on it. Like they'll see you on speed or on crystal and they'll be like, 'Who's he, he's on speed, let's go get away from him,' you know"*. Similarly, non-users reported having friends who "lost themselves" through crystal use and tended "not to care anymore"; this was described by one non-user as a "Jekyll and Hyde effect" and, according to these non-users, ultimately resulted in damage to their friendships. Several also suggested that crystal users could develop an increased indifference to the feelings or opinions of, friends or family, alluding to the "Jekyll and Hyde" effect.

I know what it [meth] can do to other people. Because when I was young, I started getting careless and heartless. I felt evil back then. Because I didn't care, I would just like, not care if people would get hurt and I would just talk to people how I wanted to. Which wasn't nice. It was bad.

Finally, another negative of crystal use was respondents' fear of losing a sexual partner or severely damaging that relationship as a result. For example, Mario described an incident where a friend of his, who had been arrested for crystal use, was released from jail and wanted to celebrate by buying crystal for the evening.

It just seemed fun and just seemed exciting so I just said, 'Okay, fine. Let's do it.' And I thought about my boyfriend, yeah, he's gonna get mad at me, but I disregarded it because I guess I was too into the moment and my attention was focused just on my friend, that he got out and I guess the relief.

Respondents were less specific about how cocaine may affect social relationships. A few respondents observed that family members' cocaine use led to deteriorated relationships with other family members. While some respondents discussed the impact of their own or others' use of cocaine on relationships with friends and family, crystal was most often described in terms of fear of rejection and disapproval from others.

In contrast, respondents tended to speak in a positive manner when discussing ecstasy and its effects on social relations. Respondents reported that ecstasy enabled people to be more social, often by decreasing inhibitions and allowing them to feel less anxious in social situations. Ecstasy was associated with social events and was described as a "community drug" that allowed youth to meet new people and friends with greater ease.

It's more of a community drug where you want to be around a lot of people. You know, it's very important. It almost, let's put it this way, it almost takes you to a childlike state. It exposes your innocence almost to the point where you'd be more honest on ecstasy than you would any other time...it's more of a friendship, it's more a community, it's more loving a person for just the person.

Emotional Aspects of Drug Use—Many respondents spoke of using drugs for the sense of happiness or euphoria that they produced. When probed about the circumstances leading up to use, some respondents described both cocaine and crystal as something that helped them to "escape" from the feelings of tiredness or depression they were experiencing. Non-users too cited this as a reason people may use drugs, but some explained that people who think they are escaping reality through drug use are mistaken. One HIV positive respondent, Chris, described the ways in which crystal temporarily diminished such negative feelings. His prescription antidepressants had not alleviated his sadness or the persistent sense of shame that left him feeling "gross" and "worse than a street hooker." Additionally, he felt great frustration at having "failed" to avoid infection.

Well, while I was depressed I felt like, I thought that, you know, speed was like an escape. Like it was something to do, it was something to keep your mind off of something really bad that your mind is on. And it makes you feel really, really good. It makes you happy, I guess, for a little while.

Respondents said less about the emotional effects from cocaine than of crystal; Steve, a non-user, described a friend who used cocaine as follows, *you must wanna go out and talk to everyone and do everything at once...She has some kind of social anxiety disorder or something so it really helps her to be more outspoken*. Among users, several did mention that cocaine produced a sense of euphoria and the pleasurable physical or emotional "numbness" associated with this state. For example, Albert, a self-reported heavy cocaine user, described the sensation: *I just feel like, I wanna say higher than everyone. I feel numb, I feel happy, good, ethereal and euphoric.... Just light and angelic in a way*.

Although it could induce a state of euphoria, no one described ecstasy as a drug to help diminish feelings of depression or fatigue. Prior research (Beck & Rosenbaum, 1994; Hunt, Evans, Wu,

& Reyes, 2005) has shown that ecstasy's effects include the ability for a user to learn more about himself through an internal exploration. Similarly, some youth, such as Robert, explained that the drug enabled socializing because it diminished feelings of anxiety while increasing one's overall sense of openness with others.

I've always thought of myself as being really shy and just kinda kept to myself, just kinda closed together and not really out there. And [ecstasy] kinda helps me socialize and embrace life with people and making friends more and just really getting to know or having to explore the type of person that I am.

Robert drew a connection between this increased openness with others and an enhancement of his ability to be himself:

I started to act a bit different by just kinda embracing all the thoughts and ideas in my mind and just kind of putting it all out there without any fear of persecution or being judged. It was just kinda... just being yourself to the fullest.

Several users echoed the non-users comments and acknowledged that coping with negative emotions through drug use was less appropriate ("less noble," as Robert put it) than achieving a sense of well-being through means that did not involve the use of drugs. Some of these youth felt that this concern was serious enough to cause them to limit their use or stop using certain drugs altogether:

I stopped [using ecstasy] because I noticed a lot of people were happy on it and they continued to stay happy and that's all you had to do is continue to stay happy. But I looked at some people and I was like "Okay, it doesn't look like you're happy. So why are you taking more? When you're not doing anything. You're at school and you're taking it... You're at work, why are you taking it?"

An additional concern about the emotional effects of drug use was specific to ecstasy. Several respondents had heard that this drug could deplete one's brain of the neurotransmitter serotonin. These same youth also described personal experiences of post-ecstasy depression, which some considered to be caused by serotonin depletion. For some, this was an acceptable downside to an otherwise pleasant drug. Others felt that this aftereffect was unpleasant enough that they would avoid future use of the drug.

Physical Health/Body Image—By far, the most common negative association, from both users and non-users, with these drugs was the effect crystal may have on one's physical health, including facial and dental deterioration, loss of appetite and resulting weight loss, increased risk for HIV or sexually transmitted infections, and general health concerns such as impaired motor functioning and cardiovascular health. Damage to physical appearance and accelerated aging were common concerns as one non-user described a friend who went from "beautiful to downright ugly". Both users and non-users expressed surprise at crystal's apparent popularity within the gay community, given the emphasis on looks and youth that they viewed as common among gay men.

I just didn't understand why in a society that is so like centered around looks and around like belonging, why would they do the one thing that takes all that away? You know, the one thing that drains them their age, their good looks, their money, everything? ...It's so contradictory.

While prior research has cited weight control as an outcome of and perhaps a motivation for crystal use, within this sample, most young men mentioned this as a negative aspect of crystal use. While a couple had experienced weight loss while on the drug and felt that their physical appearance had improved, most respondents believed that one could lose too much weight through heavy crystal use, (one young man described a friend of his who was a habitual crystal

user as a “skeleton”; another cited that while rapid weight loss was possible that was “not the way to do it”) and felt that users may never be able to regain that weight. *Negative things... the first thing I can come up with is with an image. It messes up your teeth, um, and skinny isn't good. It doesn't look too good. It doesn't look too healthy at all.*

Respondents shared fewer health concerns associated with cocaine, the most common being nose bleeds or nasal deterioration. Interestingly, non-users were more likely than users to note a positive association with cocaine and weight control. Some respondents reported that it could promote general health deterioration, including one young man who had never used cocaine, and felt that the potential risks of using it were too high.

I wouldn't want to use it only because you're snorting something into your brain...I think that would be really detrimental in the wear and tear on your physiology.

Respondents did consider brain damage to be a serious negative health outcome of drug use in general, particularly in the case of ecstasy. Several youth had heard that the drug causes brain damage, impaired cognitive functioning or Parkinson's disease. According to a few individuals, this concern was strong enough to cause them to limit their intake of ecstasy or avoid it entirely.

Discussion

Findings from this study can offer greater insight and complexity to understanding how and why YMSM may perceive cocaine, crystal and ecstasy, the three most often used substances. The primary themes identified in this study are similar to what other researchers have found with general youth populations with regards to drug use decision-making (Boys, et al., 1999) and actual or perceived adverse effects of drug use (Fountain, et al., 1999; Williamson, et al., 1997;). It is important to investigate the context in which YMSM use drugs as well as their attitudes towards drugs given their elevated risk for HIV. Both users and non-users shared divergent attitudes and perspectives about how the use of these drugs, especially crystal, may impact weight loss, personal health and sexual and social relationships. Crystal and its effects were, at times, described at length by some respondents. The frequency in which crystal was described can perhaps be explained in part by trend theory (Agar & Reisinger, 2001), in that the prevalence of the drug in this geographic and community setting, compared to other drugs, has resulted in individuals' hyper-awareness of the drugs and its effects. While cocaine was the most commonly used substance among our sample, respondents had the least to say about it and/or described it as relatively harmless. The perception of cocaine as relatively harmless in comparison to crystal and the lack of freely available information on the potential consequences of cocaine use may have contributed to the higher levels of reported use. In spite of these negative, or at times conflicting, views and perceived dangers, many of the respondents continue to engage in experimental and more regular use of these substances.

It may be helpful to consider these findings through the lens of Fishbein and Middlestadt's (1989) Theory of Reasoned Action in that the consequences of deciding to engage in drug use are often weighed before deciding to use them. Specifically, the theory postulates that decisions to engage in a behavior (e.g., drug use) are influenced by the perceived consequences of the behavior; the approval or disapproval of others; and the context of the situation. Therefore, it follows that one would expect an individual to not engage in drug use if he holds a relatively negative attitude towards drug use and also perceives that members of his social network would view drug use negatively. However, while these respondents identified as users do tend to reflect on the potentially negative outcomes that may result, they often still decide to engage in that behavior. In fact, those included as users tended to be better informed of the effects of drug use than non-users and were more likely to articulate these negative associations; however, the precise differences as to why some choose to use drugs and others do not were not

discernible with these data. As these young men enter “emerging adulthood” (Arnett, 2000) they will most likely be presented with a variety of choices regarding different behavioral options.

Prior research (Diaz, Heckert, & Sanchez, 2005) has shown that weight loss is often a perceived benefit crystal and cocaine use. While some respondents may have included weight loss among the benefits of crystal use, the more common response described this type of weight loss as unhealthy and undesirable. Negative outcomes related to health were among the most common responses when asked to describe negatives of drug use. Some respondents also described the often-conflicting image in what was described as the gay community in that crystal was at times described as the drug of “our community”, but members of that community are believed to be concerned about image and being attractive and desirable to others. This paradox was confusing to some respondents who saw “tweakers” as destroying their health and body image.

The connection between use of drugs like crystal or cocaine and high-risk sex is well documented in the literature (Halkitis, Parsons, & Stirratt, 2001; Stall & Purcell, 2000). Respondents had much to say about crystal and sex, which may be partially due to their continual exposure to the public health messages about crystal in gay clubs and other venues. When discussing drugs and sex, respondents did mention some of the often-cited desirable characteristics of crystal use such as enhanced sexual sensations and endurance. Negative associations of crystal’s effects on sexual behavior were mentioned just as frequently, and often described as causing an emotional detachment from a partner.

Respondents, even those who continue to use crystal, tended to believe that there was a social stigma attached to its use and that relationships with intimate partners and family members could be negatively affected by its use. However, other respondents reported that their partner’s use of crystal often influenced their own use of the drug. Whether contributing to or discouraging one’s use, it is clear that sexual partners and social networks can influence some young men’s use of crystal.

In contrast to crystal’s perceived negative impact on social relationships, ecstasy was typically perceived as a less harmful drug and potentially beneficial to social relations and interactions. The impact of ecstasy on youths’ relationships should be considered in light of respondents’ descriptions of the drug as providing them with an increased sense of freedom to act or express themselves in ways in which they might otherwise have been afraid. While this aspect of the drug’s effects has been documented in different populations (Hunt, Evans, Wu, & Reyes, 2005; Sterk, Theall & Elifson, 2006), it may have particular relevance for YMSM. Recent research has revealed elevated levels of social anxiety in sexual minority adolescents (Safren & Pantalone, 2006), as well as associations between elevated social anxiety and sexual risk behavior in this population (Hart & Heimberg, 2005).

While this study provides some context around individual choices related to drug use, there are several limitations. The frequency of drug use and individual preferences are all based on self-reported data and the issue of self-report bias should be taken into consideration. However, we believe that the use of ACASI in the quantitative survey minimizes this effect. In addition, this qualitative study was cross-sectional in nature and did not allow an examination of changes in attitudes and perceptions over time. We know from this study that these YMSM are initiating use of these drugs at this time in their lives. Some research has hypothesized that YMSM are more likely to engage in high-risk activities when first introduced to gay bars and clubs due to the novelty and the need for gay affirmative social support (Rosario, Schrimshaw & Hunter, 2004). HYM data will eventually be analyzed longitudinally and may shed light on how behaviors and attitudes change over time. While attempts at generalizability are not made, the small sample size of qualitative respondents may be a limitation in the range of experiences

and perspectives. Finally, recruitment efforts were conducted at gay-identified bars and clubs (like most studies with YMSM). Little is known about those who do not have access to or choose not to access venues and research focusing on those with less connection to gay communities may reveal different patterns of drug use.

These findings have important implications with respect to both future research and prevention efforts aiming to reduce use of crystal, cocaine and/or ecstasy among YMSM. Additional research that focuses on the cognitive, behavioral, cultural, social, and/or psychological differences between those who choose not to use these drugs and those who do, will provide a better understanding of how some of these decisions are made. Prevention experts can expand dissemination of information on the negative health outcomes related to crystal use to include diminished sexuality and loss of intimacy, as well as address potential consequences of other popular drugs, such as cocaine. Knowing that health and body image are considered to be important within this population, interventionists should integrate crystal's negative effects on health and body into curricula. In addition, alternatives to the positive associations YMSM have of crystal such as improving focus on work or creative outlets and energy boosts should be identified and included in intervention programs. Given that prior research has consistently identified a link between high-risk sex and crystal use, the current findings that some YMSM feel crystal affects one's emotional attachment to intimate partners are noteworthy. Intervention efforts with crystal should include this aspect of creating intimacy in sexual relationships as well as negotiation skills for those in relationships. Attempts should also be made to include sexual partners and others who may influence one's decision to use drugs, and crystal in particular, in intervention programs.

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Table 1

Description of the Study Sample (N=526), Lifetime Club Drug Users (n=214) and Qualitative Participants (n=24)

Variables	Categories	Total Sample n (%)	Club Drug Users n (%)	Qualitative Participants n (%)
Age	18 – 19 yrs	206 (40)	69 (32)	10 (42)
	20 – 21 yrs	196 (37)	76 (36)	8 (33)
	22+ yrs	124 (24)	69 (32)	6 (25)
Race/ethnicity	African- American	126 (24)	41 (19)	9 (38)
	Caucasian	195 (37)	98 (46)	7 (29)
	Mexican descent	205 (39)	75 (35)	8 (33)
Immigration	Born in other country	82 (16)	29 (14)	3 (13)
Residence	Family	281 (54)	95 (44)	12 (50)
	Own place/apartment	191 (36)	89 (42)	8 (33)
	With friends/partner	36 (7)	18 (8)	1 (4)
	No regular place/other	17 (3)	8 (4)	2 (8)
Employment	In school	113 (22)	50 (28)	2 (8)
	In school, employed	142 (27)	19 (10)	9 (38)
	Employed, not in school	201 (38)	88 (48)	10 (42)
	Not employed, not in school	70 (13)	25 (14)	3 (13)
Education Level ^a	Less than high school	28 (5)	2 (.9)	2 (8)
	Currently enrolled in high school	23 (4)	11 (5)	1 (4)
	High School Diploma/GED	194 (37)	72 (34)	9 (38)
	Vocational School	12 (2)	4 (2)	1 (4)
	Some college	242(46)	103 (48)	9 (38)
	Bachelor's	25 (5)	10 (5)	2 (8)
	Post Bachelor's	2 (0.4)	0 (0)	0 (0)
Sexual identity	Gay	391 (74)	166 (79)	15 (68)
	Other same-sex identity	38 (7)	12 (6)	2 (9)
	Bisexual	85 (16)	30 (14)	5 (21)
	Straight	3 (1)	2 (1)	0 (0)
	DK/RF	9 (2)	4 (2)	0 (0)
Family drug or alcohol problem		259 (50)	122 (58)	17 (71)
Street economy (ever)		110 (21)	73 (34)	5 (21)
Homeless (ever)		45 (9)	22 (10)	4 (17)

^a 49% of total sample (including 33% of those with a HS diploma) are currently enrolled in school

Table 2**Distribution of Drug Use**

Substance Use	Mean Age of Initiation	Lifetime	Past 3 months
	Total	Total	Total Sample
	N=526	N=526	N=526
Tobacco	16.66	66%	54%
Alcohol	16.49	91%	86%
Marijuana	16.75	64%	40%
Club drug	18.30	41%	22%
Cocaine	18.20	24%	10%
Crystal	18.10	20%	9%
Ecstasy	17.89	22%	8%
GHB	19.08	5%	2%
Poppers	18.69	15%	6%
Ketamine	18.24	7%	1%
Other speed	17.41	9%	2%
Prescription drug	18.28	26%	11%
Viagra	19.21	6%	2%
Anti-anxiety	18.00	14%	5%
Depressants	17.39	5%	1%
Anti-depressants	17.11	8%	2%
Opiates	17.78	17%	7%
ADD	17.54	10%	3%
Crack	18.23	5%	1%
LSD	16.65	5%	1%
PCP	17.29	2%	0.4%
Mushrooms	18.05	15%	3%
Heroin	18.43	2%	1%
Other inhalants	16.85	11%	3%
Rohypnol	20.00	1%	0.4%
Other drugs	17.04	6%	2%
Polydrug use ^a	--	--	22%
IDU ^b	--	2%	N/A

^a Polydrug includes use of 2 or more illicit drugs in past three months, excluding alcohol and tobacco

^b IDU measured for lifetime use only