Sex, Drugs, and Treatment:

How are Sexual Risk-Taking and Substance Use Associated and Do Current Treatment Programs Adequately Address These Associations for Gay Men?

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by

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Dedication

I want to dedicate this to my grandmother, who did not live to see it completed. She died two days after I proposed this dissertation. She was a driving force in my getting to this point.

Grandmother, you will always live on in our hearts.

Acknowledgements

I would first like to acknowledge my husband Sean for his support and encouragement throughout this project. If it were not for him, this project may have never been completed. I was able to use him to bounce ideas off, read pieces to help me make the wording make sense after days and days of looking at the same sentence. Sean, I love you and thank you for helping to get me to this point.

When it came to encouragement beyond my husband, that would be my chair, Dr. Valory Mitchell. When I began this project and became overwhelmed by looking at the whole project and feeling as if I did not know where to start, Dr. Mitchell was the one who helped me break down the project into smaller and more manageable pieces. Dr. Mitchell's comments, edits, and advice helped guide this project forward to the point of completion. Thank you for all the work you did with me on this project, Dr. Mitchell. I am eternally grateful.

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Speaking about the loss of a committee member near the end of this project, I would be remiss not to also acknowledge and thank Dr. Rhoda Olkin, the PsyD. program director at the San Francisco campus. We had a flurry of emails one afternoon to come to a resolution to the problem so I could move forward. I was aware that, as program director, Dr. Olkin must have

been very busy and that a resolution may take some time to reach. But Dr. Olkin made me feel as if I were her only priority that day, and we had a resolution less than 24 hours after learning of the loss of this committee member. Thank you, Dr. Olkin. Your support and attention was much appreciated.

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Abstract

Studies reported that an estimated 18.74% of gay men become involved in unprotected anal sex (UAI) in conjunction with substance use. This creates a public health problem because unprotected sex increases the chances of transmitting HIV. This project looks at sexual risk-taking behavior, use of substances and having risky sex; and treatment models in use with these men. It explores how methamphetamine use for some gay men is intertwined with their views on intimacy and social interaction, and the extent that current substance treatment models address the needs of gay substance abusers who engage in UAI. Four research questions were asked:

What is it about particular situations that make them associated with substance use? What is it about substance use that leads men to UAI? Does the association between substance use and UAI cause distress that may lead men to seek treatment? To what extent are current treatment programs helping gay men reduce their substance use and sexual risk-taking?

Twelve gay men ages 25-59 were interviewed, all of whom were frequent users of legal and illegal substances. The interviews were coded for themes, which were then analyzed. Findings suggest many reasons these men use substances, and many situations in which they use them. The most reported substance used was methamphetamine, and the Internet was the most reported situation that men used to connect with other men. Some men expressed that sex is less intimate, but more intense, on substances, and that substances help "lubricate" social encounters and provide the ability to assert oneself more sexually.

Men who had received treatment stated that most treatment programs do not focus on the issues related to gay men and substance use. Of the six men who had reported past treatment, five stated that gay specific treatment would be useful for them in their recovery. Clinical implications of this finding indicate it would be practical for clinicians and treatment facilities to

become familiar with reasons for gay men's substance use and the unprotected sex that is associated with it. Limitations to this project include the small sample size and the lack of geographic diversity.

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Sex, Drugs, and Treatment

CHAPTER I

Introduction

An estimated 18.74% of gay men become involved in unprotected anal sex in conjunction with substance use, especially the use of crystal methamphetamine (Bonell et al., 2008; van de Ven et al., 1998; Zablotska et al., 2009). This is a public health problem because unprotected sex increases chances of transmission of HIV and other sexually transmitted infections (STIs). This project explores how meth use and unprotected sex, for some gay men, is intertwined with their views on intimacy and social interactions, in particular settings. This dissertation also explores the extent to which current substance abuse treatment models address the treatment needs of gay male substance abusers who engage in unprotected sex.

This project first reviews literature in three categories: (a) sexual risk-taking behavior; (b) gay men who use substances and have unprotected sex; and (c) substance abuse treatment models in use with these men. Within these three main areas, more specific subcategories will be explored, such as condom use, what situations lead to substance use and sexual risk-taking, prevention of unprotected anal intercourse with casual partners (UAI-C), and drug treatment strategies.

Through interviews, this project will explore the following four questions, which will be reviewed in more detail in the next chapter:

- 1. What is it about particular situations that make them associated with drug use?
- 2. What is it about substance use (especially methamphetamine) that leads men to unprotected anal sex?
- 3. Does the association between substance use and unprotected anal sex cause distress (fear of HIV or other STIs) that may lead gay men to seek treatment?

4. To what extent are current treatment programs helping gay men reduce their substance use and sexual risk-taking?

While the reviewed studies provide general information that can help answer these questions, this study adds specific information about how treatment tailored to gay men who seek it for methamphetamine use may also benefit those who practice sexual risk-taking behaviors.

The target group for this project is gay men 18 and older who participate in the club culture, gay bar scene, and other gay venues associated with the frequent use of legal and illegal substances. A goal of this project is to help advance understanding and end the epidemic of substance use and self-destructive behaviors among some gay men. By conducting interviews, this project brings the unique experiences of these men to the current literature.

CHAPTER II

Literature Review

This chapter will review literature on gay men and their sexual risk-taking, their substance use, and drug abuse treatments for gay men. The first section will review the literature on types of sexual risk-taking within the gay male community. The second section will review literature on gay men and substance use, including the relationship of sexual risk-taking to substance use, and situations or places associated with both substance use and unprotected anal intercourse with casual partners. The third section will review the literature on treatments and interventions currently available for gay men using substances.

Sexual Risk-Taking

In this project, sexual risk-taking is defined as behaviors associated with unprotected anal intercourse, such as bug chasing, barebacking and serodiscordant unprotected anal intercourse with casual partners (UAI-C). This section will describe several behaviors that affect sexual risk-taking, and the HIV risks associated with them.

HIV serostatus disclosure. HIV serostatus disclosure is the act of honestly informing potential sex partners about one's HIV status. Failure to disclose honestly one's HIV status leaves potential partners with insufficient information to determine the potential risk of unprotected anal intercourse. For potential sex partners who are serodiscordant (where one is HIV+ and the other HIV-), this information can lead to decisions to stop (at least anal) sexual contact, inform decisions about ways to minimize risk and reduce harm, or to avoid sexual contact entirely in order to reduce risk. Examples of ways to reduce risk include insisting on condom use during anal and/or oral intercourse, deciding to avoid certain high-risk sexual acts

such as anal intercourse, or adopting specific sexual roles such as being the insertive partner rather than the receptive partner.

Honest disclosure can be very difficult for some gay men. This difficulty can lead some who practice unprotected anal intercourse (UAI) to increase their risk of transmission of or infection with HIV. Some studies have found that for gay men, especially HIV-positive men, disclosure in person was found to be very difficult because they fear rejection (Holt et al., 2011). In contrast, disclosure online was much more likely and easier due to the feeling of an anonymous "wall" between users, along with less worry of personal rejection and embarrassment (St. De Lore et al., 2012). One participant in that latter study was quoted as saying:

You are not face-to-face so you can talk to the person and ask blunt questions or be more honest with your feelings. All you see are words so you can ask questions that you might not ask and not be embarrassed (St. De Lore et al., 2012, p. 599).

There is also a chance that the opposite may be true. With the increase in online and mobile apps used for meeting (e.g., Grindr, Scruff, Manhunt, Adam4Adam), opportunities for anonymous and casual sex also increase, with some men experiencing less care or concern for their sex-partners met online, which may in turn facilitate lack of disclosure or dishonest disclosures about one's serostatus (P.S. Theodore, personal communication, January 31, 2014). However, lying in disclosure is beyond the scope of this project.

Negotiated safety. Negotiated safety (NS) is a practice that some gay men in a primary relationship adopt in order to have unprotected anal intercourse (UAI) within the relationship and make rules or agreements for sex outside the relationship (Crawford, Rodden, Kipax, & van de

¹ Literature cited in this review has not discussed the potential problem of lying about serostatus or making a dishonest disclosure. This problem, while an important one, is not addressed in this study.

Ven, 2001; Guzman et al., 2005). The term was first used in 1993 to describe men in seroconcordant HIV-negative primary relationships who practice UAI together but not with casual partners outside the relationship (Guzman et al., 2005). The intention of negative safety is to maintain an assurance of safe sex for primary partners, while allowing for UAI within the primary relationship.

Guzman et al. (2005) state that the major tenets of NS are that both partners are tested for their HIV status together and the couple sets up rules that do not allow UAI outside of the relationship with casual partners. The rules within these agreements are to be either monogamous or to practice only lower-risk sexual activities outside the relationship with casual partners; these practices would include but are not limited to protected anal sex and unprotected oral sex (Guzman et al., 2005). Guzman et al. also state that, for these relationships and NS agreements to work, the couples must also agree to disclose any risky sexual contact that happens outside the relationship.

However, research has shown that some men in NS relationships do not honor their agreements, thus eliminating the assurance of safety. Guzman et al. looked at how men in NS relationships adhere to their agreements. The study was conducted in the San Francisco Bay area with participants from Oakland and the Tenderloin, Mission and Castro districts in San Francisco. From a diverse, community-based sample of 340 HIV-negative men the authors identified 76 (22%) who were in a seroconcordant primary relationship for at least six months. This would be the study sample for their research. The researchers divided the men into three groups consisting of those in an NS relationship, those having no UAI with a primary partner (NUAP), and a group having UAI with primary partners without an agreement not to have UAI with casual partners. The NS group was made up of 38 (50%) men, and the NUAP group

included 30 (39%). Eight men had UAI within and outside the primary relationship with no rules. The NS group was made up of 11 (29%) Caucasian, nine (24%) African American, 12 (32%) Latino and six (16%) who identified as other. The NUAP group was made up of six (20%) Caucasian, 11 (37%) African American, 11 (37%) Latino and two (7%) who identified as other. The authors provided three age ranges for the two groups, 18-29 (n=25), 30-39 (n=24) and 40+ (n=19) (Guzman et al., 2005).

Of the 38 men, 61% (n=23) of the NS group adhered to their agreements and made disclosures when the agreements were violated (Guzman et al., 2005). Twenty-nine percent (n=11) of the NS group had violated rules in their NS agreement, including having UAI outside of the primary relationship with a casual partner (n=7, 18%) in the past three months, and another seven (18%) had reported acquiring a sexually transmitted infection (STI) in the past year. The study authors concluded that, while NS relationships were common among the men, 29% violated some aspect of their agreement, putting both themselves and their primary partner at risk of HIV or other STI transmission. The authors suggest that prevention efforts for NS relationships should encourage adherence to the agreements and rules, disclosure when rules are broken, and routine HIV and STI testing for both partners (Guzman et al., 2005).

Sexual risk-taking and condom use. The majority (>70%) of gay men who have anal intercourse with casual partners use condoms (van de Ven et al., 1998); however, 15-20% engage in UAI-C (Unprotected Anal Intercourse-Casual).

Van de Ven et al. examined the factors that contribute to repeated UAI-C. Of the 659 men who completed three annual interviews, 517 had participated in anal intercourse (both protected and unprotected) with a casual partner at least once in the six-month period prior to one of the interviews. Twenty of the total interviewed (659) reported unprotected anal intercourse at

all three interviews; they were the focal group of the study and made up 3% of those interviewed, while the remainder comprised the comparison group (n=497). The men in the focal group ranged in age from 21-47 at the first interview, with the median age being 31, while the comparison group age range was 17-70 at first interview, with the median age being 31. No other specific demographics were given for the men in this study. Twelve men from the focal group reported being HIV-positive at the first interview; six reported being HIV-negative (however, two of these seroconverted between the first and second interviews), and two reported unknown HIV status. In the focal group, 80% (n=16) had more than 10 casual sex partners over the previous six months at the first interview, 65% (n=13) had more than 10 at the second interview, and 85% (n=17) had more than 10 at the third interview. Of the comparison group, 42.5% (n=211) reported having casual sex at the first interview, 36.4% (n=181) at the second, and 34.6% (n=172) at the third. In the focal group, few of the men did not use condoms at all – only four at first interview, two at second interview, and one at third interview reported having never used condoms with casual partners. Only one man reported never using condoms at all in the study period.

The authors found that the 20 men in the focal (UAI-C) group differed significantly from those in the comparison group. The focal group tended to be HIV-positive and had a higher number of casual partners. In addition, these men had unfavorable attitudes toward condoms, practiced a wider range of anal sex activities that are considered risky (e.g., fisting, using sex toys, sadomasochism, watersports) and tended to use recreational drugs frequently.

The authors also noted that much UAI-C occurs repeatedly by the same men, (men in the focal group) instead of occasional lapses in judgment by many men. Van de Ven et al. (1998) note that some men with "HIV-positive status...engage in a broad range of anal practices,

believing unprotected withdrawal prior to ejaculation to be safe... [These] men also hold... less favorable attitudes towards condoms" (p. 336).

More recent studies conducted in San Francisco and Sydney found similar results (Zablotska et al., 2009, Prestage, Hurley, & Brown, 2013, Chen et al., 2013). These studies also describe additional risky behaviors, such as "cum play" (defined below), serosorting (which occurs when gay men strategically limit UAI-C to others whom they believe are of the same HIV status as themselves, which is not always true), and UAI-C with serodiscordant partners, which is seropositioning. Prestage et al. (2013) define "cum play" as sharing ejaculate which can include "ejaculation over the anus, rubbing semen over the anus or using semen as lubricant for masturbation or for digital or penile penetration" (para. 4).

Chen et al. (2013) note that men who have sex with men (MSM) who engage in UAI-C tend to serosort (choose partners who have the same HIV status as themselves) to reduce HIV transmission risk. Chen et al (2013) do not give an exact percentage, but do say that some men who engage in UAI-C and believe they are serosorting actually fail to serosort successfully because one or both partners do not know their serostatus. The authors also state that a portion of MSM engage in conscious risk, defined as knowingly engaging in UAI-C with partners of serodiscordant status (Chen et al., 2013).

Since prior research had focused on UAI-C restricted to only seroconcordant casual partners, Zablotska et al. (2009) chose to study serodiscordant UAI-C, which is on the rise worldwide. Chen, Gibson, Weide, and McFarland (2003) found an overall increase in serodiscordant UAI from 11.7% in 1999 to 16.4% in 2001. The authors believe this increase was due to highly active antiretroviral treatment (HAART) that had made the previous face of HIV

disappear. Chen et al. also point out that studies in Toronto and Amsterdam showed similar increases.

Zablotska et al. (2009) studied 2,274 gay men in Sydney who had unprotected anal intercourse with casual partners (UAI-C). The study used data from two larger studies on gay men in Sydney, Positive Health (PH) and Health In Men (HIM). The median age for the men in the PH study sample was 46-years-old; 36-years-old in the HIM study. No other demographic information was given for this three-year study. Zablotska et al. (2009) found that UAI-C increased significantly among HIV-positive men (34 to 47%); however, it decreased slightly among HIV-negative men (29% to 26%). The authors also found that, in both the HIV-negative and HIV-positive men, the proportion of UAI-C with serodiscordant partners increased significantly over the three years the study was conducted. The increase among HIV-positive participants was from 19.4% in 2003 to 30% in 2006, and among HIV-negative participants was from 10.53% in 2003 to 12.7% in 2006 (Zablotska et al., 2009). This increase was statistically significant in the HIV-negative cohort; however, it did not reach statistical significance in HIVpositive men. This trend is particularly alarming because of the major risk for these HIVnegative men potentially to seroconvert. These studies imply that more HIV-negative men are increasing their sexually risky activities (especially UAI-C) due to poor attitudes toward condom use and less potential to disclose or inquire about HIV status. It seems that HIV-positive men have practiced UAI-C after being given a positive diagnosis; however, UAI-C with HIVnegative men is also a growing problem that can increase HIV transmission rates.

Chen et al. (2013) found similar results in their study of 731 HIV-negative men and 206 HIV-positive men who had UAI-C with serodiscordant partners in San Francisco. However, Chen et al. separated the men into those who serosort—successfully or not—and those who

practice conscious risk, knowingly engaging in UAI-C with partners of serodiscordant status. The authors found that, over the six-month period, conscious risk was practiced by 4.8% of HIV-negative men and 15.7% of HIV-positive men; this difference was statistically significant. Zablotska et al. (2009) found that HIV-negative men in "stable" (monogamous) regular relationships were less likely to have serodiscordant UAI-C (outside of the stable relationship) than those who were not in a relationship. In addition, having a higher number of partners was significantly associated with having serodiscordant UAI-C.

Zablotska et al. (2009) also report that in both cohorts of HIV-negative and HIV-positive men, "... use of the Internet (Positive: 16.8%, Negative: 5.73%), saunas (Positive: 18.5%, Negative: 4.21%) and sex clubs (Positive: 21.1%, Negative: 8.79%) to find partners. The use of Viagra (Positive: 19.9%, Negative: 6.20%), other party drugs (Positive: 27.6%, Negative: 8.82%), and injecting any drugs (Positive: 21.1%, Negative: 15.15%) were associated with higher likelihood of serodiscordant UAI-C" (p. 640). The results, according to the authors, may suggest an increase in HIV-negative men engaging in serodiscordant UAI-C, which is a risky behavior for HIV transmission. While these behaviors are more prevalent among HIV-positive men, the behaviors are increasing significantly among HIV-negative men and could catch up to those of HIV-positive men without interventions and education about the risks and dangers.

Barebacking and Bug Chasing

Bug chasers are a distinct subgroup of gay men who not only engage in UAI-C, also called "barebacking"—an intentional form of UAI—but who do so with the intent of contracting HIV (Moskowitz & Roloff, 2007). It is important to clarify that the act of "barebacking" does not define the subgroup of gay men labeled as "bug chasers." Instead, Moskowitz & Roloff (2007, p. 348) define bug chasers as "physiologically healthy, HIV-negative gay men... actively

seeking seroconversion by engaging in unprotected sex with HIV-positive partners." That definition is drastically different from the definition of barebackers, who are defined as "men [who] intentionally engage in unprotected anal sex...[these] men bond over, and value unprotected anal intercourse as a primary and important construct representing exclusivity, defiance and unadulterated pleasure" (Moskowitz & Roloff, 2007, pp. 348-349). The authors state, "even though all bug chasers are indeed barebackers, not all barebackers are bug chasers" (Moskowitz & Roloff, 2007, p. 348). These authors printed 134 bug chaser profiles from a barebacking website. Some of the terminology that helped the authors detect the bug chasers include "poz me" (which means "turn me HIV positive"), "looking for diseased loads," "convert me," and "all bugs are welcome" (Moskowitz & Roloff, 2007, p. 352).

Unlike bug chasers, out of a total sample of 284 gay men, 234 (82%) barebackers reported a desire for UAI-C with seroconcordant partners and none reported a preference for serodiscordant partners (Moskowitz & Roloff, 2007). In addition, Moskowitz and Roloff found that barebackers did not require UAI-C for partners chosen; however, bug chasers made it a requirement for partners. This may be interpreted to mean that, for barebackers, UAI-C was a preference for pleasure that left leeway for condom use. However, bug chasers showed more arousal by the disease than by the pleasure. Based on these findings, Moskowitz and Roloff insist that bug chasing can no longer been dismissed as something that does not exist. Knowing the difference between bug chasers and barebackers is important, especially for the current study, because of the difference in participants' reasons for having UAI-C. Both of these are subcultures of gay men and not representative of the entire gay male community; however, the increases are concerning. It is important to conduct continued research into these two subcultures

to create interventions and education programs tailored appropriately to address unique needs of each subculture.

Gay men and substance use

This section explores substance use among gay men, with particular emphasis on situations that lead to substance use and, consequently, to increased sexual risk-taking.

Bonell et al. (2008), in a review of studies in the United States, Australia, and the United Kingdom, concluded that, in the U.S. and Australia, from 10-40% of gay men report methamphetamine use, depending on the specific population or subculture of gay men studied. In all three countries, alcohol and other drug use is much more prevalent than methamphetamine use. However, it should be noted that these statistics represent only gay men who participate in these studies, which may recruit samples from locations where drug use is more prevalent (e.g., gay bars, clubs, circuit parties and/or sex-venues). The range of 10-40% is representative of men in these studies and should not be generalized to all gay men.

Substance use and sexual risk-taking. Substance use and casual unprotected anal intercourse have long been associated in some gay male communities, and studies have looked at this association (Bolding et al., 2006; Clutterback, Gorman, McMillan, Lewis, and Macintyre, 2001; Rawstorne, Digiusto, Worth, and Zablotska, 2007; Drumright et al., 2006; Ricks, Chang-Arratia, Lansinger, and Dziegielewski, 2010; Aguilar and Sen, 2013, Bonell et al., 2008). Larkins, Reback and Shoptaw (2006) reviewed previous studies that were conducted as part of a research group the authors belong to in Southern California where they found that, among gay men seeking drug treatment, large numbers (80+ %)² reported that meth and sex either often or

² This percentage and other data reported by Larkin et al. come from a review of a large number of studies they had done in a research group. The sample sizes and other demographic characteristics of those studies were not included in the review paper.

always go together (Larkins et al., 2006). "Comments participants make about methamphetamine are that it makes sexual encounters "intense," "long-lasting," "uninhibited," "kinky," "heightened," and "wild" (Larkins et al., 2006, p. 125). The authors also report that this sample of active drug users (at least in early use stages) reports that meth helps with the ability to meet people and connect socially and sexually with other men, including shedding self-consciousness and more directly asserting sexual desires.

The men in these studies report that these sexual benefits are short-lived. The authors report that a significant number of participants (75+ %) claim "... their sexual behaviors become 'compulsive' while using the drug.... Many come to view their sexual behaviors as 'dark,' 'repetitive,' 'compulsive,' 'obsessive,' and 'risky,' and the study authors argue that the compulsive nature of their sexual behavior while using the drug contributes to sexual risk-taking" (Larkins et al., 2006, p. 125). This, according to the authors, can lead these men to fuse meth use and sex to create the false belief that the men will not have fulfilling sex lives without meth. This belief then can lead to relapse once they have become abstinent.

Grov et al. (2007) conducted a cross-sectional street-intercept survey of 1,178 MSMs in New York City and Los Angeles. No specific demographic information was given. One hundred forty-four (12%) men reported an HIV-positive status; 1,001 (85.2%) reported a HIV-negative status; and 33 (2.8%) did not report an HIV serostatus. One hundred fifty-six (13.3%) identified as barebackers; 950 (80.6%) as non-barebackers; and 72 (6.1%) did not provide this information. Self-identified barebackers spent more time (15.56 hours per week) on the Internet looking for sex than did non-barebackers (7.28 hours per week). Barebackers also spent the most time on the Internet looking for Party and Play (PNP or PnP) encounters (3.15 hours per week for barebackers, 1.66 hours per week for non-barebackers). PnP is a term that MSM use to describe

sexual activity, safe or unsafe, enhanced by substance use, typically meth, cocaine and ecstasy (Grov et al., 2007). Of the 156 identified barebackers, 62 were HIV-positive and 94 were HIV-negative. Of the 62 HIV-positive barebackers, 30 (48%) reported serodiscordant UAI-C and, of the 94 HIV-negative barebackers, 20 (24.4%) reported serodiscordant UAI-C (Grov et al., 2007). Some of these men established safer sex practices by their choice of intercourse position, as 50% of the HIV-positive barebackers were bottoms (receptive) while only 20% were tops (insertive); for HIV-negative barebackers, 55% were tops versus 15% bottoms. These rates do show that, although there is a form of serosorting among barebackers, there are still those who run the risk of transmitting HIV through barebacking.

Drumright et al.'s 2006 study of 194 men who have sex with men (MSM) showed an association between substance use and sexual risk-taking. Their study found that substance use, including combining meth with erectile dysfunction medications, is associated with sexual risk-taking and may contribute to HIV transmission (Drumright et al., 2006). Drumwright et al. also showed that meth use is a predictor of UAI-C, which suggests that meth use plays a significant role in HIV transmission.

Halkitis, Mukherjee, and Palamar (2008) found similar results in their yearlong study of 232 "club-drug-using" MSM in New York City. The median age of the participants was 33 years old. Eighty-seven (37.5%) tested HIV-positive at baseline, with 137 (62.5%) testing negative at baseline. At baseline for the study, 208 (89.7%) of the men identified as gay, with 24 (10.3%) identifying as bisexual. The results of the study were consistent with previous studies and again showed that drug use (especially meth) and UAI-C were heavily related. The authors note that only experimental studies can show a causal relationship; however, they believe this 12-month longitudinal study shows a strong relationship. The authors note their results build upon previous

research, which shows that the association between drug use and sexual risk-taking holds true over about 20 years of published research.

Situations of substance use and sexual risk-taking. Situations and places that promote drug use are, or can be, situations where sexual risk-taking occurs. This section explores some of these situations and the risks associated with them.

Vacation and travel. MSM sexual risk behaviors, especially UAI-C, increase while on vacation when compared to being at home (Whittier, St. Lawrence, and Seeley, 2005). In their survey, 204 (37%) participants reported UAI-C with non-main partners; of those, 55 (27%) reported UAI-C with a non-main partner at home, 80 (39%) on vacation and 68 (34%) both at home and on vacation. Forty-eight percent of participants reported having protected anal sex with non-main partners in both locations. Participants who reported UAI-C while on vacation were younger (32.4 years for UAI compared to 35 years for non-UAI), tended to live in metropolitan areas (65% for UAI, 35% for non-UAI), tended to be single (83% single for UAI, 17% single for non-UAI), used "methamphetamine alone (55%) as well as methamphetamine in combination with sex (60%), and report alcohol use combined with sex" while on vacation (73%) (p. 99). The authors report that 73% of men who had UAI-C on vacation accompanied that with alcohol use, while 60% of men report UAI-C on meth while on vacation (Whittier et al., 2005).

In addition, men who had more negative attitudes toward condom use (70%) had more UAI-C with non-main partners, both while at home and while on vacation, than did the comparison group (Whittier et al., 2005).

The authors point out that the brevity of the survey was a possible limitation to their study (Whittier et al., 2005), and that most items were categorical instead of interval based.

However, they noted theirs was the first study looking at these behaviors and this population with this design, and that future studies may be able to surmount these limitations.

In 2009 in a sample of 413 men, Kaufman et al. (2009) looked at risk behaviors for gay men travelling; they found that international travel is associated with higher sexual risk behaviors, and that about 50% of international travelers engage in casual sexual experiences.

Drugs and alcohol use may increase for some on vacation, but the excitement around the vacation itself may be enough to lower people's inhibitions. "The combination of sun, substances and casual sex has been labeled 'situational disinhibition'" (Kaufman et al., 2009, p. 1135).

Kaufman et al. (2009) compare men who vacation at gay resorts with those who do not. In this sample, 181 (43%) had visited gay resorts or hotels and, of those, 24% went with the intention of finding a sex partner. Men who had visited a gay resort over the prior six months had a greater mean number of sex partners (5.7 compared to 3.4), had more STD's (40% versus 22%) and were more likely to have attended a circuit party (34% versus 16%).

The authors point out that gay resorts or hotels are typically not the focus for structural interventions for HIV prevention. The authors suggest that approaching these men during the day on the beaches before the nightlife activities could help prevent HIV risk behaviors.

Circuit parties, club culture and gay bars. Circuit parties are loosely defined as multievent, weekend dance parties, mostly attended by gay and bisexual men, which are held each year in the same city and tend to have themes associated with them. Examples of these parties include, but are not limited to, the White Party in Palm Springs, Reunion in San Francisco or the Black and Blue Ball in Montreal (Mansergh et al., 2001; Theodore, Antoni, and Duran, 2014). Circuit parties, club culture, and gay bars have been associated with drug and alcohol use and sexual risk-taking. O'Byrne and Holmes (2011) studied sexual risk-taking and drug use at gay circuit parties, obtaining brief surveys from 17 men at a circuit party and then conducting a formal interview with each of them later at an off-site location. They found two main themes to explain participants' substance use: to overcome inhibitions, and to overcome physical limitations.

Participants stated that alcohol and drugs were used to remove any self-imposed inhibitions and to ensure that sexual and other connections were made. The authors found through the interviews that men who would not necessarily have UAI-C when sober use substances intentionally to be more sexually explorative, including UAI-C. Overcoming physical limitations (the second theme) includes overcoming physical exhaustion to remain at the party, overcoming the pain of receptive anal intercourse, prolonging sexual activity, and enhancing the pleasure of sexual activity. One interviewee described the link between using substances and engaging in receptive anal intercourse: "I don't bottom unless I'm high. That's just a relax thing. It hurts if I don't, and if I'm high then it doesn't" (O'Byrne and Holmes, 2011, p. 8).

The authors caution that results came from a convenience sample of a few men who use drugs at gay circuit parties and engage in unsafe sex.

A more recent study from Theodore et al. (2014) wanted to get a more focused and nuanced understanding of what the connection with substances and sexual risk-taking is, more so than had been studied previously. The authors recruited 197 gay and bisexual men who in the previous three months had attended a circuit party, club or bar and were recruited from coffee houses and doctor's office in south Florida.

The age range of the men that participated was 20-49 years old, and the authors noted that the sample was predominately White and Latino. The authors also stated that of the men that

participated, 41% were vacationing in south Florida. The authors found that certain drugs considered "club drugs" were more associated with UAI with a casual partner (Theodore et al., 2014). The main finding for this study is that methamphetamine, either alone or in connection with other substances, was more predictive of UAI with a casual partner. However, MDMA (ecstasy) showed the least predictive of UAI with a casual partner. The authors due caution that due to underreporting of substance use and sexual risk-taking that the model developed from this study may underestimate how the use of these club drugs influence UAI with a casual partner.

Bathhouses, sex clubs, sex parties and the Internet. Bathhouses, sex clubs, sex parties and using the Internet to "hook-up" are associated with sexual risk-taking. Men who enter these situations are more likely to use substances while practicing UAI-C than men who do not (Grov and Crow, 2012). Grov and Crow recruited 526 men from bathhouses, gay clubs/bars and Craigslist.org in New York City in 2009-2010. The participants' mean age was 39. The HIV statuses were 68 (13%) HIV-positive, 407 (78%) HIV-negative and 44 (9%) unsure of their HIV status at the time of the interviews. Three hundred two (58%) identified as white, 96 (18%) as Hispanic/Latino, 58 (11%) as African American/Black, 29 (6%) as Asian, Pacific Islander, Hawaiian and 37 (2%) as multiracial/ethnic or "other." Four hundred sixteen (80%) identified as gay, 71 (14%) as bisexual, 14 (3%) queer-has sex with men, and 17 (3%) heterosexual-has sex with men. Forty-six percent of the men indicated their most common place to meet sex partners was online; 23% reported bathhouses; and 20% reported bars or clubs. Meeting online was associated more with substance use (M=2.0, SD=1.6) and UAI-C (M=2.9, SD=2.1) than the other two venues, although when looking at venues strictly for barebacking, bathhouses and the Internet were similar (M=2.9, SD=2.0 [bathhouses] and 2.1 [Internet]).

Mimiaga et al. (2010) studied 40 men who reported attending or hosting a sex party in the past 12 months in Boston. The mean age of the participants was 41. Twenty-one (53%) reported as White, 14 (35%) reported as Black/African American, 4 (10%) reported as Hispanic/Latino, 1 (3%) reported as American Indian/Alaska Native, 1 (3%) reported as Asian/Native Hawaiian/Pacific Islander and three (8%) reported as other. The authors report that 2 (5%) reported as straight, 33 (83%) as gay and 5 (13%) as bisexual. The authors defined a sex party as a gathering for the purpose of sex that included five or more men, and which was preplanned. Grov et al. used this same definition in their 2013 study on sex parties. The difference between the two studies is that Mimiaga et al. used a smaller sample and interviews were conducted. For Grov et al., a survey was conducted online with a much larger sample of 2,063. Grov et al. (2013) divided the participants into three groups: sex party non-attendees, n=650; lifetime attendees, n=480; and past year attendees, n=933. Ethnically, 1,253 (60.75%) reported as White; 318 (15.42%) reported as Black; 231 (11.2%) as Latino; and 260 (12.6%) as multiracial or other. One thousand eighty-one (76.65%) reported as gay; 435 (21.1%) reported as bisexual; 30 (1.45%) reported as queer; and 17 (0.8%) reported as heterosexual.

Both studies had similar findings, in that a majority of men attended sex parties for the ease of finding sexual partners (Mimiaga 55%, Grov 66%). Both found high use of drugs associated with UAI-C. In Mimiaga, 38% reported that drug use was a primary reason for attendance, and Grov found that 67.8% used substances other than alcohol. Mimiaga et al. (2010) reported that 75% of participants reported no discussions about condom use or HIV status, and Grov et al. (2013) reported 74.8% of the partygoers had UAI-C with a male partner.

Treatment and Prevention

This section reviews the literature on treatment for substance use disorders and interventions for UAI-C prevention, and will explore the extent to which current substance abuse treatment models address the treatment needs of gay male substance abusers who engage in unprotected sex.

Bonell et al. (2008) point out that little is done to adequately address gay men's alcohol and drug use or the consequences of that use. Only recently has attention been paid to developing drug treatment models tailored for gay and bisexual male communities. Promising findings stem from these interventions; however, funding for gay male-specific programs remains limited and difficult to acquire. This is a lost opportunity for public health, as studies show that interventions for treating drug and alcohol abuse and tailoring these interventions to the gay community is possible and effective (Wanigaratne, Davis, Pryce, and Brotchie, 2005; Larkins et al., 2006; Lyons, Chandra, Goldstein, 2006; Jaffe et al., 2007; Bonell et al., 2008). A reason for this neglect, as Bonell et al. (2008) point out, is that the focus in gay men's health (for funding purposes) has been on HIV and its prevention, rather than on substance abuse. However, research has begun to look into the relationship between substance use and sexual risk-taking. Bonell et al. note that research started comparing gay men who used and those who did not use, but that once researchers started using "case-crossover" studies, causality could be drawn between substance use and sexual risk-taking.

Current drug treatment models. Many forms and variations of treatment models for substance use are in existence. For this project, cognitive behavioral therapy (CBT), contingency management (CM) and motivational interviewing (MI) will be briefly reviewed.

Cognitive behavioral therapy for substance abuse treatment. Haves and Levin (2012) use the term "contextual cognitive behavioral therapy" (contextual CBT) as an overarching term for CBT methods, Contextual CBT includes many evidence-based therapies for the treatment of substance abuse. Some of the therapies that fall under this "umbrella" are dialectical behavioral therapy (DBT), a comprehensive psychosocial treatment that consists of skills training groups and individual therapy; acceptance and commitment therapy (ACT), a therapeutic approach that increases psychological flexibility (accepting all aspects of experiences without engaging in avoidance behaviors); mindfulness-based relapse prevention (MBRP), based on mindfulness and relapse prevention therapy to reduce the possibility of relapse; and metacognitive therapy (MCT), which teaches strategies to help one control the cognitive system. Each of these methods, at its core, is based on traditional CBT methods of thought blocking (techniques to help reduce and/or eliminate negative or self-destructive thoughts), cognitive restructuring (recognizing and challenging maladaptive thinking), skills training (to help increase a person's confidence; in this instance, to interact with others sober) and relapse prevention techniques (techniques designed to help prevent relapse once triggers cause thoughts of relapse) (Beck, Wright, Newman and Liese, 1993).

Contingency management for substance abuse treatment. Contingency management (CM) is a behavioral treatment that uses positive reinforcement for negative urine samples while in treatment (Petry, Rash and Easton, 2011; Jaffe, Shoptaw, Stein, Reback and Rotheram-Fuller, 2007). Positive reinforcement describes the process of adding something following the occurrence of a desired behavior; in CM, this positive addition is giving a reward for the desired behavior of a clean urine sample.

Petry et al. (2011) explain that CM involves three basic principles that help substanceabusing clients create and sustain behavioral changes. These principles are:

- 1. Monitor the behavior while frequently assessing for change;
- 2. Reinforce the desired behavioral changes (e.g., abstaining from drug use as evidenced by a negative urine sample) as it occurs; and
- 3. Withhold the positive reinforcers when the desired behavior does not occur.

In this type of treatment, the client receives gift cards or other items each time a negative urine sample is submitted. According to Petry et al. (2007), many meta-analyses and randomized trials have demonstrated the efficacy of CM across substance abusing populations.

Motivational interviewing for substance abuse treatment. Miller and Rollnick (2013) define motivational interviewing as a collaborative, person-centered counseling style with the purpose of enhancing a person's own motivation and desire for change. Motivational interviewing consists of four fundamental processes: engaging, focusing, evoking, and planning (Miller and Rollnick, 2013).

Miller and Rollnick describe the first fundamental process, engaging, as establishing a collaborative therapeutic relationship. In this process, the clinician uses reflective listening as a way to understand the client with compassion and without any judgment (Miller and Rollnick, 2013). The clinician understands that ambivalence is normal and an expected part of treatment for the client. The second fundamental process is focusing, where the client and the clinician clarify the process and the direction for change (Miller and Rollnick, 2013). Evoking is the third fundamental process, when the focus is on the client's ideas for change and how that change might take place. Finally, the fourth fundamental process is planning, when the client becomes

responsible for choosing to change, making a specific change plan, and making the change happen.

Drug treatment specific for gay men. Beginning around 1998, research led by Dr. Steven Shoptaw and Dr. Cathy Reback began on a gay-specific CBT treatment for methamphetamine use. The research led to a published, manualized treatment for gay and bisexual men who use methamphetamine (gay-specific CBT) (Shoptaw, et al., 2005). This manualized treatment began as a treatment that was a 48-session, 16-week intervention and, while this worked well in the lab, the researchers found it was too difficult to replicate in the community (Reback, Veniegas, & Shoptaw, in press). The researchers and the team working with them held focus groups with community service providers who work in HIV and substance abuse. They scaled back the original gay-specific CBT manual (GCBT) from 16 weeks to an eight-week (24-session) program, more easily workable in the community (Reback et al., in press). This led to the new manual, *Getting Off: A Behavioral Treatment Intervention for Gay and Bisexual Male Methamphetamine Users*. Currently, Reback (personal communication, February 11, 2014) states that the *Getting Off* program is used nationally, but no numbers document how widely it is used.

Two studies (Shoptaw et al., 2005; Shoptaw et al., 2008) looked at the efficacy of the 16-week, 48-session GCBT intervention compared to other interventions available; then a third study looked at the results of these two studies of the 16-week program compared to the eightweek intervention (Reback & Shoptaw, 2011).

In the 2005 study, Shoptaw et al. recruited 162 gay and bisexual men (GBM) in Los Angeles, with the participants randomly assigned to one of four treatment groups: a CBT group, a CM group, a CBT + CM group, and a GCBT group. Specific participant demographics were

reported for each of the four individual treatment conditions and not for the overall participant pool. The CBT group was comprised of 40 participants with a mean age of 37.5 years. The group was made up of 80% (n=32) Caucasians, 12.5% (n=5) Hispanics (author's term), 2.5% (n=1) African Americans and 5% (n=2) Asian Americans (author's term). The CM group was comprised of 42 participants with a mean age of 34.8 years. The group was made up of 76.2% (n=32) Caucasians, 16.6% (n=7) Hispanics, 2.4% (n=1) African Americans and 4.8% (n=2) Asian Americans. The CBT + CM group was comprised of 40 participants with a mean age of 38.0 years. The group was made up of 77.5% (n=31) Caucasians, 17.5% (n=7) Hispanics, 2.5% (n=1) African Americans and 2.5% (n=1) Asian Americans. The GCBT group was comprised of 40 participants with a mean age of 38.5 years. The group was made up of 85.0% (n=34) Caucasians, 5% (n=2) Hispanics, 5% (n=2) African Americans and 5% (n=2) Native Americans (Shoptaw et al., 2005).

The authors expected and found higher reduction of drug use in the two conditions that contained CM, with the CM condition producing the highest reduction, followed by the CBT + CM condition and the GCBT condition (Shoptaw et al., 2005). When the authors looked at reduction in sexual risk-taking, the GCBT condition produced the highest rates of reduction in unprotected receptive anal intercourse (URAI); however, the authors found no statistical differences among the four treatment conditions for unprotected insertive anal intercourse. At 6-and 12-month follow-up evaluations, the authors noted that sexual risk behavior reductions were maintained, but that no statistical differences were found among the four conditions (Shoptaw et al., 2005).

In the Shoptaw et al. study in 2008, the authors wanted to know how GCBT compared to gay social support therapy (GSST), and they predicted the GCBT intervention would be much

better than the GSST intervention in reducing both methamphetamine use and sexual risk-taking. GSST is defined as peer-driven social support with HIV education and risk reduction groups (Shoptaw et al., 2008). For this study, the authors randomized 128 participants between the two treatment conditions and reported the demographics separately for the two treatment conditions. Both the GSST and the GCBT conditions had 64 participants. The GCBT group had a mean age of 38.1 years and was made up of 65.7% (n=42) White (authors' term), 21.8% (n=14) Latino, and 13% (n=8) other (authors' term). The GSST group had a mean age of 36.0 years and was made up of 64.2% (n=41) White, 21.8% (n=14) Latino, and 14% (n=9) other (Shoptaw et al., 2008).

The authors found that both conditions produced similar effects on reducing substance use; however, GCBT was superior in leading to reduction of drug use in the methamphetamine subgroup. The authors note this finding should be interpreted carefully, as those who were assigned to the GCBT condition had less severe methamphetamine abuse than those in the GSST condition (Shoptaw et al., 2008). These results show that a tailored treatment for gay men can produce an effect on the reduction of substance use. The authors stated it is not possible to make definitive statements on how effective GCBT is over GSST, as both produced significant results in reduction of substance abuse (Shoptaw et al., 2008). Findings were consistent with previous results for the GCBT-tailored therapy.

Reback and Shoptaw's 2011 study compared the results of the 2005 and 2008 studies to a modified GCBT intervention, which combined GCBT and CM as a third treatment condition. In this study the new GCBT + CM condition was made up of 171 participants with a mean age of 39.9 years, with 59% (n=101) Caucasians, 21% (n=36) Hispanics (authors' term), 8% (n=14) African Americans and 10% (n=17) Asian Americans (Reback & Shoptaw, 2011). The third

treatment condition used the scaled GCBT (24 sessions over 8 weeks). All three conditions showed similar reduction in methamphetamine use and sexual risk-taking, with some minor differences. The original 16-week intervention showed the most efficacy for consecutive weeks of methamphetamine abstinence; the replicated GCBT (the 2008 study) demonstrated the most efficacy for the reduction of the number of days of methamphetamine use; and the modified GCBT condition demonstrated the most efficacy on the reduction of male sex partners (Reback & Shoptaw, 2011). This study showed that all three GCBT conditions reduced UAI-C at similar levels, and the modified version expanded on the results of GCBT by adding the effects of CM (which showed best effects at reducing methamphetamine use) into one complete behavioral intervention (Reback & Shoptaw, 2011).

Gay-specific CBT effects on meth use, depression and sexual risk-taking. In a study of 145 gay or bisexual men seeking treatment for meth use, Jaffe, Shoptaw, Stein, Reback, and Rotheram-Fuller (2007) hypothesized that those who participated in the treatment and achieved more rapid decreases in drug use would also experience greater decreases in depression and unprotected anal intercourse (UAI-C). Participants ranged in age from 19-57 years old. Eighty percent of the sample were Caucasian, 12% were Latino, 3% African American, 3% Asian/Pacific Islander and 1% Native American. The authors randomly assigned the men to one of four treatment conditions at an outpatient treatment facility in Los Angeles. The participants were required to attend the clinic at least three times a week for 16 weeks, where they provided urine samples, completed the research measures, and received the assigned treatment. The four treatment conditions were cognitive behavioral therapy (CBT; n=33), contingency management (CM; n=38), CBT + CM (n=36), and a gay-specific CBT (GCBT; n=38) (Jaffe et al., 2007). The CBT group consisted of a 90-minute group intervention that taught the participants how to

abstain and prevent relapse of meth use. The CM group used reinforcers (vouchers that could be exchanged for gift-cards to local merchants) that increased in value with each consecutive urine sample that showed abstinence from meth. The CBT + CM group received both the CBT and the CM treatment components. The final group, the GCBT group, involved 90-minute group sessions culturally tailored to incorporate gay concepts in addition to targeting UAI-C, but did not incorporate the CM component.

This study focused more on how reducing methamphetamine use would affect depression and sexual risk-taking. In this study, the GCBT group not only showed a more rapid decrease in methamphetamine use, but there was also a correlated reduction in depressive symptoms and sexual risk-taking (Jaffe et al., 2007). Jaffe et al. (2007) pointed out that, while the GCBT intervention showed the greatest reductions, the other groups also did show reduction in methamphetamine use, depressive symptoms, and sexual risk-taking.

UAI-C prevention. Harm reduction is an approach that meets a client in his current status, irrespective of his readiness to abstain completely from a specific target behavior (e.g., substance use, sexual risk-taking or any other behavior deemed harmful; McVinney, 2006). By doing this, professionals help clients to become more conscious of the harms (i.e., potential consequences) linked to the "target" behavior, and offer possible ways of minimizing such harms. "Harm reduction" is a term that has been used widely in the substance use community, but has begun more recently to be applied to other behavioral interventions such as high-risk sexual behavior. Van de Ven et al. (1998) advocate a harm reduction approach to UAI-C because with this approach there is less stigmatization, which gives gay men agency in their sexual practices to prevent HIV. This may also promote the ability to communicate and be more assertive in negotiating the use of condoms.

Grov et al. (2007) point out that prevention campaigns should reinforce harm reduction practices such as serosorting or strategic positioning (sexual positioning based on serostatus), encouraging HIV-negative serodiscordant barebackers to top, and HIV-positive serodiscordant barebackers to bottom.

Zablotska et al. (2009) found that UAI-C with partners who are serodiscordant was increasing in the gay community, and the researchers feel it is important that prevention campaigns consider these findings. It is also important, they note, that these same prevention and education campaigns recognize the difficulty of disclosure, as well as the outcomes of disclosure. Interrupting the link between methamphetamine use and UAI-C. Reback (1997) conducted a study that examined the use of methamphetamine in the gay and bisexual male community. She used three research methods for this study: observation in the field, interviews (n=25), and focus groups (n=38). Five focus groups consisted of former crystal methamphetamine users (n=9), youth (n=10), men of color (n=6), HIV-positive men who were street users (n=8), and HIVpositive middle- and upper-class professionals (n=5). The study had 63 participants, 49% (n=31) Caucasian, 22% (n=14) Hispanic/Latino, 19% African American (n=12), 7% (n=4) Native American and 3% (n=2) Asian/Pacific Islander. The study's author did not give a mean age of participants, but reported the age range as 17-51, with 98% of participants reporting knowing their serostatus. The study found that methamphetamine was used as a positive coping mechanism for dealing with a gay identity and engaging in gay sex, and the report stated that all participants had sex while under the influence of methamphetamine. Compared with sex without methamphetamines, the sex with methamphetamines was described as more intense, heightened, and of longer duration, with more sexual risks than were desired. Methamphetamine was reported to make the user more uninhibited. Reback (1997) reported that 44% (n=28) were

introduced to methamphetamine by a sexual partner, while 40% (n=25) were introduced to the drug through gay male friends at a gay event or social scene. This report was a start for further research on the use of methamphetamine by gay men and its effects on them.

Methamphetamine is closely associated with sexual expression and sexual experiences among gay men; however, meth's harm to gay men's sexual health has become a public health concern (Larkins et al., 2006). Methamphetamine is associated with sexual risk factors such as the decreased use of condoms, increased number of sexual partners, less HIV status disclosure, and the increased risk of unprotected anal sex (Larkins et al., 2006). Because of these sexual risk-taking behaviors, gay men who use methamphetamine are at higher risk for HIV infection. This has given rise to many public health campaigns that address the association between methamphetamine and HIV infection risk. Larkins et al. (p. 125) give examples of these campaigns "...several social marketing campaigns were designed to discourage methamphetamine use among gay men; they highlighted the disturbing connection between the drug's use and HIV... (NYC's 'Buy Crystal, Get HIV Free!' and Miami's 'Meth=Death')".

Landovitz et al. (2012) conducted a study of 53 meth users who engaged in UAI-C and were HIV-negative. The mean age was 36.1. Twenty-nine (54.7%) were Caucasian/White, five (9.4%) were African American/Black, 16 (30.2%) were Hispanic/Latino, 1 (1.9%) were Asian/Pacific Islander and two (3.8%) were other/multiracial. Forty-four (83%) were gay, eight (15.1%) were bisexual and one (1.9%) was other. After a possible HIV exposure, they were given post-exposure prophylaxis (PEP), a month-long course of HIV medication. Instead of using PEP alone, Landovitz et al. combined PEP with contingency management. In their study, the authors defined contingency management as a behavioral intervention that uses positive

reinforcement in the form of vouchers, gift certificates, or other goods and services that reinforce abstinence (measured via negative urine samples).

Thirty-five (66%) participants initiated PEP during three months of the study. The authors found that CM was an effective treatment for reducing methamphetamine use and, in turn, reducing sexual risk-taking by HIV-negative MSM (Landovitz et al., 2012). In addition, CM helped participants adhere to their PEP regimens, illustrating another route to HIV prevention.

Zule et al. (2012) also examined an intervention for MSM who are not in treatment to reduce meth use and sexual risk-taking behaviors. Thirty-nine participants attended a single session of motivational interviewing (MI) that was divided into eight sections completed over an average of 55 minutes. Zule et al. (2012) report that of the 39 men who attended the MI session, 31 completed the two-month, follow-up interview. These 31 became the sample studied. The mean age of the participants was 38.3 years. Fifty-two percent were African American, 45% were Non-Hispanic White, and 5% were other. Sixty-eight percent of the men were gay/homosexual, 26% were bisexual, and 6% were straight/heterosexual. Findings suggested that the single session MI intervention was useful in the reduction of meth use and sexual risk-taking behaviors, as well as increasing condom use (Zule et al., 2012).

These two studies show that, outside of treatment, interventions exist that will help reduce both meth use and sexual risk-taking which, in turn, will help to reduce the likelihood of HIV transmission.

The present study

The literature shows that there **is** a connection between methamphetamine use and risky sexual behavior, and that interrupting the substance/sex connection is critical for sustained reduction of sexual risk-taking. The hope of this project is to add to this body of literature.

By using a qualitative research method, it is hoped that the rich experiences of those men interviewed will be added to the current literature. Through this, the intent is for a greater understanding of the experience of these at-risk men and their search for help. Current literature has documented numbers on how these treatments work (i.e., it has begun establishing the efficacy of gay-tailored forms of drug treatment). However, little has been published on the subjective experiences of these men and what may further shape and inform programs for methamphetamine-using gay men who engage in risky sex. This gap in the literature is what this project aims to address.

Chapter III

Method

Purpose

Current literature has documented numbers on how these treatments work (i.e., it has begun establishing the efficacy of gay-tailored forms of drug treatment). However, little has been published on the subjective experiences of gay men and what may further shape and inform programs for methamphetamine-using gay men who engage in risky sex. The purpose of this study is to fill this gap in the literature is what this project aims to address, and answer the following four questions through interviews:

- 1. What is it about particular situations that make them associated with drug use?
- 2. What is it about substance use (especially methamphetamine) that leads men to unprotected anal sex?
- 3. Does the association between substance use and unprotected anal sex cause distress (fear of HIV or other STIs) that may lead gay men to seek treatment?
- 4. To what extent are current treatment programs helping gay men reduce their substance use and sexual risk-taking?

Participants

Participants were 12 gay men ages 18-60 years old who lived in San Francisco and participated in the club culture, gay bar scene, and gay venues that have been associated with the use of substances and/or unprotected anal intercourse. Participants were excluded if they did not meet the previous criteria fully. In addition, participants were excluded if there was the presence of an active mental illness, such as a psychotic thought process or if English was not their

primary language as this could affect the understanding of the interview questions. Finally, those that were currently in residential treatment or currently incarcerated were also excluded.

Procedure

To recruit participants, I posted flyers in gay bars, community centers, and health centers.

I also posted announcements on Craigslist and on LGBT community online sites.

Announcements provided an email address where potential participants could contact me. I returned their email and used screening questions to confirm that they were eligible for the study

up a time and place for the interview.

(Appendix A). If eligible and interested, I reminded them of the requirements of the study and set

When we met, I went over the informed consent with them (Appendix B) and gathered demographic information. Then I proceeded with the interview, which was tape-recorded and transcribed.

Measures

Demographics form (Appendix C). The demographics form was utilized to get basic information about the participants, including age, current employment or source of income, annual income, highest level of education completed, relationship status, sexual orientation, and racial/ethnic identity.

Interview (*See Appendix D*). The interviews averaged 45 minutes, with a range of 30 to 80 minutes and were semi-structured (see Appendix F). Participants were asked open-ended questions to "tell their story" about their past methamphetamine use and unsafe sex. In addition, they were asked about their attempts (if any) to stop methamphetamine use with or without treatment and what difficulties they encountered in their treatment experience (if applicable); their sense of whether (and in what ways) treatment was (or was not) helpful; their current

practices relative to methamphetamine use and sex, and why. Participants were also asked (if they had not already said) their views on the connection between methamphetamine and unsafe sex, and the connection between methamphetamine use and intimacy for gay men; situations and places that they associate with substance use; and what it is about methamphetamine use they think leads MSM to engage in unprotected anal intercourse.

The literature noted many situations that may result in substance use. This project focused on six situations found to be most prevalent based on the literature. These situations (places) are vacation, circuit parties, bathhouses/sex clubs, sex parties, mobile phone app hookups and Internet hook-ups. While one could argue that mobile phone app hook-ups and Internet hook-ups may be in the same category, this project looked at them separately, since a computer (Internet) is stationary and a mobile phone app is portable.

Additionally, participants were asked what might cause the level of distress one may need to seek treatment (e.g., fear of HIV or other STIs). Finally, participants were asked if they went through treatment or were currently in treatment and, if so, were those treatment programs doing enough to help gay men struggling with substance use and to help them reduce sexual risk-taking.

Additional questions were available as a list of guidelines for the interviewer to use in cases where the informant had not provided sufficient information about some aspect of his story.

Data Analysis

Demographic information collected from the interviews was treated descriptively to provide a summary description of the sample's demographic characteristics. These are the only statistical analyses run for the study. I conducted a qualitative analysis of the interview data to

find common themes about the following topics: experiences with substances, sexual intimacy, and treatment.

This study utilized recorded interviews. Verbatim transcriptions of the recordings were created to ensure accuracy. Miles et al. (2013) make the point that data analysis begins even before the actual data collection starts, as the researcher makes decisions on the data to collect, how to ask/frame the research questions, and within what framework the data will be presented. For this study, the questions surround themes related to gay men's substance use, unprotected anal intercourse, and treatment issues. The responses from the interview were sorted and categorized into themes (codes), which is the first process of data analysis (Miles et al., 2013; Galletta, 2013). Miles et al. (2013) explain that themes start out as descriptive and eventually become inferential once more of the data begins to suggest thematic hypotheses.

In this project, the interviews were divided into four sections: (a) treatment; (b) gay men and substance use; (c) situations of substance use and sexual risk-taking; and (d) sexual risk-taking. Once the interviews were transcribed, I analyzed the transcript to organize the data.

Galletta (2013) breaks this "beginnings" up into four steps, which are (a) to complete a post interview reflection, (b) organize and store the data, (c) establish an inventory for recording thematic codes, and (d) check on the accuracy of the interview transcripts. Regarding the post-interview reflection, Galletta suggests this is important to do after each interview to reflect on the interview itself, questions that may have come up in the interview, and new ideas that come up during the interview. Galletta also suggests that reflecting on the interactions between the interviewer and the interviewee is critical for the analysis of the data and for how to continue with data collection through the remaining interviews.

The next step in analysis of the interview data is to organize and store the data, according to Galletta (2013). In this step, it is important to transcribe the audio recordings and check the transcripts for accuracy (Galletta, 2013). In this early analysis, Galletta states that certain thematic patterns will begin to become evident and that these thematic patterns "represent a core level of meaning and are often referred to as codes" (p. 122). This process also leads to organizing the codes into categories.

Similarities and differences among the participants' responses were identified.

Quotations from the answers given by participants are presented in order to give examples of themes.

As Miles, Huberman and Saldana (2013) suggest, these qualitative data can provide a deeper and richer understanding of the participant's experience and can speak to the complexity of the research topic. Miles et al. (2013) also point out that "well-analyzed" qualitative studies can have a deeper flavor that is more useful to practitioners and other readers than a summary of numbers from a quantitative study.

CHAPTER IV

Results

In this chapter, the demographics are presented, as are themes associated with the four questions brought up in the introduction of this project. This chapter is organized to address those questions.

Demographics

Participants ranged from 25-59 years of age. Ten of the 12 participants fell into two age categories equally; 30-39 (n=5) and 50-59 (n=5). Half (n=6) of the participants self-reported as White; three Black/African American; two Asian/Pacific Islander; and one Mixed Latino/White. The sample was relatively of lower income despite higher education, with high unemployment, and with only about 45% men of color.

Ten of the 12 were single, one divorced and one married. Seven reported being HIV-negative, four are HIV-positive and one did not know his status. The participant who was unsure of his status stated that he had a possible exposure recently; a baseline test came back negative, but he would need to take a confirmation test again in three months.

The 12 men were given three options to describe their employment status: employed, unemployed, and student. Just over half of the men (n=7) reported being employed; about one-third (n=4) reported being unemployed; and one reported currently being a student.

Five of the 12 were college graduates; three completed some college; three were high school graduates; and one participant had a graduate degree (JD) but was unemployed and on disability at the time of the interview. Annual income was grouped into four levels: \$10,000 and under (n=4), \$10,001 to \$29,999 (n=5), \$30,000 to \$49,999 (n=2) and \$50,000 and above (n=1). (See Table 1 for all demographic data.)

Table 1.

Demographics

Characteristic	Frequency	Percent
Aga	(n=12)	100%
Age	1	0.22
18 - 29	1	8.33
30 – 39	5	41.67
40 – 49	1 5	8.33
50 – 59	3	41.67
Race/Ethnicity		
Black/African American	3	25
Asian/Pacific Islander	2	16.67
White	6	50
Mixed Race	1	8.33
Relationship Status		
Single	10	83.33
Divorced	1	8.33
Married	1	8.33
Partnered	0	0
HIV Status		
Negative	7	58.33
Positive	4	33.33
Don't Know	1	8.33
Education		
High School Graduate	3	25
Some College	3	25
College Graduate	5	41.67
Graduate School	1	8.33
Employment		
Employed	7	58.33
Unemployed	4	33.33
Student	1	8.33
Income		
\$10,000 or Under	4	33.33
\$10,999 - \$29,999	5	41.67
\$30,000 - \$49,999	2	16.67
\$50,000 and above	1	8.33

Substance use leading men to unprotected anal sex

This section asked, "What is it about substance use that may lead gay men to condomless anal sex?" First, substance use was explored, and then attitudes toward condom use, then barebacking and bug chasing.

Substance Use (See Table 2). This project defines substance use as the consumption of alcohol or any substances/drugs (prescription, legal or illicit) for the purpose of recreation or "getting high." This includes alcohol, medical marijuana and prescription drugs prescribed by a physician but used outside of how the medication was prescribed. Illicit substances were any substance not prescribed to the individual, or any substances that were used although prohibited by federal and/or state law.

A majority of participants (n=9) were polysubstance users over the past year. The single most used substance was methamphetamine (n=9). Seven participants reported having used cocaine (powdered and crack) in the past year. Six participants used both alcohol and marijuana (medical and recreational) over the past year before being interviewed.

Wesley (a pseudonym, as are all the names used here), age 36, described a typical pattern of polysubstance use: "Crack – probably I'd say once a month, which, at one point, it was every day, but in the last year, probably once a month; crystal meth to a lesser degree, maybe once every other month. As far as alcohol, just about every day."

Six participants talked about binge-using substances. Binge usage is consistently using one or more substances for a period of two or more days in a week. Derrick, age 34, described his binge use: "Cocaine again has been binge using a couple weeks at a time, which would be every other day maybe. So when I'm using for a couple weeks at a time – binge using – the meth

use can sometimes be daily, sometimes not. The cocaine use can sometimes be daily, sometimes not."

The least used substances were club drugs – gamma-hydroxybutyric acid (GHB, n=2), 3,4-methylenedioxy-methamphetamine (MDMA, n=1) and alkyl nitrates (Poppers, n=2). In addition, use of prescription substances Vicodin (n=1), Adderall (n=1), and an herbal supplement called "Herbal-E" (n=1) were reported by some men. The limited use of these substances could be due to many reasons; however, it was clear from the data and the interviews that the prescription substances did not promote the type of sexual desires that were sought from substance use by the men in this study.

Participants were also asked if they had used an erectile dysfunction drug (e.g., Cialis, Viagra, etc...), as literature reported this may have an association with sexual risk-taking and potential HIV transmission (Drumright et al., 2006). Of the 12 men who participated in this study, four had used an erectile dysfunction drug in combination with another substance.

Table 2. Substance Use.

Substance	Frequency (n=12)	Percent 100%
Cocaine (crack)	2	16.67
Cocaine (powder)	5	41.67
Methamphetamine	9	75
Alcohol	6	50
Marijuana	3	25
Marijuana (medical)	3	25
Erectile Dysfunction medications	4	33.33
GHB	2	16.67
Poppers	2	16.67
MDMA	1	8.33
"Herbal-E"	1	8.33
Adderall	1	8.33
Vicodin	1	8.33

Attitudes towards condom use. Seven of the 12 participants reported rarely or never using condoms with casual partners either while on substances or not. Five reported often or always using condoms.

Logan, age 25, who is same-sex married, reported that he dislikes condoms but feels they are necessary when with casual partners:

I think they are very inconvenient. So this is why I always was striving to have one partner so I don't have to and he doesn't have to use them. But for people who are single and meet often or rarely for casual sexual encounters, I would say that it's one of the

necessities that they need to take. I think, like, for society reasons and for hygienic reasons they're very important and so far the best we have. But from a point of a couple, I think they are not necessary.

There were several reasons reported for rarely or never using condoms. Important for this study is that they used condoms when they were sober, but when they were high or drunk it just was not something they thought about. Additional reasons offered were that condoms are uncomfortable, inconvenient, cause a loss of feeling that inhibits sex, "kills the mood," or ruins the intimacy. Curt, age 35, explained:

Well, one thing, I didn't really know the person that well. And usually, if you stop to use a condom, it kind of kills the mood. Like, they don't like – like, why you asking these kinds of questions? I mean, like, if you use a condom, it's usually you talk about it beforehand, like, not like right during. And I guess I was just hanging out, and we were doing stuff, and it wasn't really planned or anything.

Keith, age 51, stated, "Again, it's a barrier. So it's not – it's not intimate, you know, to be – yeah."

These feelings and beliefs were a consistent theme with men who did not use condoms and those who did use condoms, but preferred not to use them. Substance use was a factor in changing one's attitude toward condom use. Wesley, age 36, stated about condoms:

...they're great. However, when you're high, you're just not really thinking about that. I mean, I always have one in my wallet. If I'm having sex with somebody, and I'm not high, always. If I am, it just really doesn't even enter my mind if I'm high."

Derrick made a similar statement regarding condom use on substances:

If I'm sober I'm definitely going to use condoms. ...if I'm high on methamphetamine then sometimes that goes out the window and other times it doesn't. It depends on - I don't - I'm not really sure what it depends on. It depends on who I'm with. It depends on how high I am.

HIV status disclosure. Half the men opted for HIV disclosure with sexual partners. However, some men stated there was no need for disclosure when having casual sex. One stated he did not disclose to a casual partner unless that person asked him. He felt it was the casual partner's responsibility to ask him.

Barebacking and bug chasing. Participants were asked if they considered themselves barebackers (only having sex without a condom) and if they bug-chased (purposely having sex with someone positive for the goal of acquiring HIV). Half the sample considered themselves as barebackers, and one of those who did not consider himself a barebacker did bareback when using substances. Eleven of the 12 men reported they did not bug chase. The one man who reported bug chasing stated, "My purpose was a way of suicide, because in the mid-to-late '80s, people were just dying. And AZT had just, maybe just come out. But people were just pretty much – people I knew just died. Yeah."

Trauma, sense of self and loneliness/socialization. When planning this project, I did not include particular questions that asked participants about their substance use being caused by past traumas, poor sense of self, or loneliness; however, these were common themes that came up for about half of the men interviewed. Childhood molestation and the guilt and shame that can come with that was the most common trauma reported. Franklin, 56, talked about his trauma:

 $It-that's \ my \ hardest \ problem... \ I-I'll \ just \ give \ you \ a \ short \ version-had \ a \ real$ traumatic experience when I was young. I come from a very wealthy family. My father is a – was

a well-known politician... unfortunately, he was the trauma. He molested me from six to 16... I knew something was wrong; I just never knew what was wrong. When I was 50 – six years ago I figured it out and it's been hell ever since. My drug usage has increased... If I'm not thinking about it... see, the trouble is I never realized that when you've been molested the oddest things make you remember the molestation. So I'm kind of caught between the rock and a hard place as far as drug usage is because what I'm not going to do is commit suicide. What I'm trying not to do is let it ruin my whole life, but I'm stuck.

The lack of having a sense of self or low self-esteem in youth was another theme that some men mentioned as a reason for getting involved with substances. This quote from Stephen, 35, shows how this can lead to substance problems:

You know, I was looking for something... I wanted to have that strong validation, and that was me back then... You know, like really concerned about what people thought of me. Was I cute enough? Or like was I smart enough? And that's what was important to me... I guess I wasn't secure enough in my sexuality back then; that like it gave me an opportunity to be around other guys, and you know, you're under the influence and your walls are lowered down. You know, your inhibitions are lowered, like your insecurities. But it would give me a false sense of reality, a false sense of strength.

Another theme for some men was the theme of loneliness — that using substance is a way for these men to feel connected and/or not socially isolated or alone. Again, Stephen has a quote that explains this idea quite well:

It's because I yearn for like – to be around people... just to have the companionship... now I'm getting better at being able to be okay with just being by myself. For me, not to be lonely... not to – like the bar closes at 2:00... now I don't want to go home. [Humans]

we're like social creatures... I just take it to the extreme. I take it up a notch, like 2:00 a.m.'s not good enough. I still want to get to know someone and mingle with people. Usually it's someone that you find online at 4:00 a.m. ... I guess it's just more for connectedness. More to be around another human being.

Situations associated with substance use

The second of the four research questions addressed in this study asked, "What is it about particular situations that make them associated with drug use?" This project focused on six situations: vacation, circuit parties, bathhouses/sex clubs, sex parties, mobile phone app hookups and Internet hook-ups.

The situation that led the most men to substance use was the Internet (n=9). Of those who met someone for substance use online, a majority (n=6) used Craigslist to meet. The participants who used the Internet to hook-up did so with the intention to "Party and Play" (PNP). This is where the sole intention of meeting up is to use substances and have sex. One man reported that these encounters could be anywhere from an hour to several hours or days.

Sorting out the intentions of others in online meetings is often complex; the following quote from Franklin, age 56, is an example of what several of the men said about meeting online:

It seems like the older guys on the list are more honest. The younger guys, pretty much, are just hustlers. They won't say it like that, but that's what it comes down to. And then a lot of people, believe it or not – it's not the sex. It's the flirting. You send like 30,000 emails and still not meet and I got tired of that. I think my limit is three emails now. If we're not giving up phone numbers or going to meet, then I'll just say – they just want to play because I have met – I met this one guy in Ukiah that I talked to on email for a year-and-a-half trying to get set up to either I go up there or he come down here. And finally,

he just told me well, I'm sorry. I just want to flirt on the Internet. Gee, should've told me that from the get-go.

The second most reported situation was sex parties. Eight of the men reported participating in a sex party in the previous year. For most of these men, these parties typically were not planned, but just "ended up happening." Mark, age 36, stated:

Well, just like you're online, and say two guys are messing around, and they're getting high. You go over, and you get high. And then another person comes over, and the next thing you know, there's like multiple people. It's not necessarily like – I don't go like online looking for sex parties. But if it happens, it happens.

Vacation (n=7), bathhouse/sex club (n=5) and circuit parties (n=4) were situations where about one third to just over half the men reported drug use. Some men did not take vacations because they were not financially affordable. Among those who did use substances on vacation, the two most used substances were alcohol (n=4) and marijuana (n=2). The reason given for this was that alcohol and marijuana were reported to be more readily available. The least used on vacation, with only one participant reporting each, were methamphetamine, cocaine, poppers and herbal ecstasy.

Five men reported using substances at bathhouses/sex clubs. The most used substance in this setting was methamphetamine, with one user reporting using either meth or crack at a bathhouse/sex club. Four of these five men reported having used substances at both bathhouses and sex clubs; one man reported only using substances at a sex club.

Of the four men who reported attending a circuit party in the past year, one man reported not having used substances while at the party, while two reported polysubstance use. The two

most reported substances used were alcohol and MDMA. One man reported methamphetamine use and one reported marijuana use, both in conjunction with other substances.

Surprisingly, mobile apps were the least reported situation leading to substance use, with only two men reporting having used mobile apps in the past year. Mobile app use was more common among younger men; however, income did not seem to make a difference.

Mark, age 36, made a statement that may reflect what causes men to use the Internet instead of a mobile app: "No, because I'm always embarrassed I'll be on the train and somebody will see the app thing on my phone."

Intimacy or Intensity

A third research question that guided this study was "What is it about substance use (especially methamphetamine) that leads men to unprotected anal sex? Ten of the 12 men reported that sex while high on substances (particularly methamphetamine) was less intimate, while two reported that it was more intimate. On the other hand, all of them said it was more intense. Gary sums up what the men had to say about the intensity:

On the drugs, it's intense, but it's also very sensually connecting. We sync up in rhythm and timing. We start to be able to expect all this nonverbally without too much. There is a point when you slam [inject substances] – and I imagine when you smoke too much, too – where the language center is just gone. I've had a couple of times where a blow job, and I had to ask the guy to just put his hands on – not to control it, but to do this so I could stop worrying about holding my head still and focus elsewhere.

³ Only eight of the men were asked about sexual intensity; however, this theme emerged in interviews with the first four men, which is why I added the question about intensity in the final eight interviews.

Experience of substance abuse treatment

The last of the four research questions asked, "To what extent are current treatment programs helping gay men reduce their substance use and sexual risk-taking?" Four of the 12 men reported being in treatment in the previous year prior to interview. Of those who did not have treatment in the past year, two reported having been in treatment previously. All four men who reported being in treatment the past year had been in treatment for substance more than once, and three had three experiences in treatment.

Of the six men who had been in treatment, three reported all rehab experiences as negative; two reported a positive experience (although one of the two had previous rehab experience that he described as negative); and one reported ambivalent experience in treatment. This quote from Stephan illustrates his experience of 12-step groups he was required to attend during his first treatment experience:

...then also being a 12-step thing also made it a little more tough as well. I was raised Catholic, and so I already had that bad taste in my mouth, and then going into a 28-day residential program where now you're forced again to have these strict guidelines. [In my second treatment], I feel that being around gay men that have the same issues, it's a lot easier. People can relate more, and I feel like it's a tight community in, like, a positive way.

Several men had trouble with religious/spiritual undertones of 12-step programs. The men stated that peer-support groups such as LifeRing or Smart Recovery were better for them, as these groups do not use a spirituality-based, 12-step approach. However, the possibility exists that programs that are not abstinence-based may have more appeal and be more effective for

some gay men. These programs tend to incorporate harm reduction, motivational interviewing and/or the stages of change model.

Another theme concerning negative experiences of treatment focused on the practice of "marathons." These marathons were weekend events at which the clients were forced to stay awake for up to 48 hours participating in various process groups where the men had to confront others in the group and be confronted by others. These groups also had the participants discuss traumas from their past. One man stated that these marathons were "torture" and "emotionally exhausting." Another described these events as "emotionally, physically and mentally exhausting. It was like the goal was to break us down, but not to build us back up."

Gay specific substance treatment. The men who had been in treatment were asked about gay specific substance abuse treatment. Of the six men who had been in substance abuse treatment, five felt that a gay specific treatment program would be most beneficial for gay men. Stephen, 35, made the following statement about his experience in both non-gay treatment and gay focused treatment:

Stonewall has been a great help for me. The facilitators are great, and I feel like I can relate to a lot of people. New Bridge was probably more straight. I think I was the only gay person there.... Comparing the two...in my first experience, I was the only one with that drug [methamphetamine] of choice, so I couldn't relate to a lot of the things, nor could they relate to me. So it was – I think it made it tough.

Alex's quote summarizes what the men who supported gay-specific treatment had to say:

Well, I really do believe that there should be some programs specifically for gay men in treatment because... gay men in my opinion are more promiscuous than any other sexual group out there because we can – it just – they're everywhere... First of all, men don't

really carry emotions. They just like to have sex and go...[T]hat needs to be addressed in recovery because we're very impulsive towards sex where we – sometimes if we're an addict we think we need the drug in order to have that fantasy, and those issues need to be addressed. And I think in a straight or religious recovery group that those... those can't really be addressed without talking about it.

Chapter V

Discussion

This dissertation explored the associations between substance use, unprotected anal intercourse (UAI), and how current treatment models work to help gay men with substance use and UAI. The experiences of the men interviewed are presented in the previous chapter, with this discussion chapter designed to interpret those responses.

The Link Between Substance Use (especially methamphetamine) and Unprotected Anal Sex?

The results of this project were consistent with available research that reported an association between substance use, mainly methamphetamine, and sexually risky behaviors, such as condomless sex. Several studies conducted in the United States, Australia, and the United Kingdom have put these associations anywhere from 10% to as high as 80% (Bonell et al., 2008; Grov et al., 2007; Larkins et al., 2006; Theodore et al., 2014). In this project, methamphetamine use was associated with UAI 75% of the time. Meth seems to make sex more intense and, without condoms, sex felt "better, less confined."

From the interviews, it became clear it is more than just the substances that led the men to have unprotected anal intercourse. Many elements lead to meth use and UAI becoming their "normal" — elements such as trauma, low self-worth and low self-acceptance, attitudes towards condoms, and the intensity/intimacy of the sex that happens while on substances. Each of these is discussed in more detail below.

In this project, a majority of the men reported being polysubstance users, which can be something that is not only dangerous but also more likely to lead to condomless sex. When it came to specific substance use, methamphetamine was the most reported substance, followed

closely by cocaine (either powdered or crack). This shows that sex and stimulant use were closely associated. Stimulants such as meth and cocaine give the user an intense high that lowers inhibitions and makes it possible to do things sexually that otherwise the participant may not do (Larkins et al., 2006; Grov et al., 2007; Drumwright et al., 2006). Many of those interviewed used methamphetamine because it is less expensive than cocaine and the "high" on methamphetamine is more intense and lasts longer than the "high" on cocaine.

A majority of participants reported rarely or never using condoms while on substances. These men had complaints about condoms, including a loss of feeling, loss of intimacy, and that condoms are inherently uncomfortable. This was consistent with literature (van de Ven et al., 1998) that stated some men who had UAI while on substances did so based on negative attitudes toward condoms. However, another reason for the lack of condom use was that, once high or drunk, the men did not even think about condom use.

This failure to think about condom use when high is not just something gay men on substances do — it is something that happens in the heterosexual community as well. However, the consequences are different for gay men. For heterosexual men, the main reason for using condoms may be to prevent pregnancy; however, for gay men prevention of HIV and STI's are the main reasons for using condoms. This is significant because condom use is the most effective way to prevent the spread of HIV and other STIs. If gay men have negative attitudes toward condom use or just do not think about the use of condoms, it may lead to an increase in HIV transmission. Some of the men interviewed had favorable views on condom use when sober; however, once they were high, the view typically changed. It is clear that the time to encourage condom use for men who use substances is before the substance use happens, but it is clear from this study that there also needs to be a way to help them bring this to mind after they are high.

Participants Reveal Their Motives for Drug Use and UAI

Two topics were introduced by the participants, and were not anticipated: trauma or loneliness, and sexual intensity.

Trauma and/or Loneliness. Men who talked about trauma and/or loneliness in their lives, used substances to help "lubricate" social encounters, shed self-consciousness, and be able more directly to assert sexual desires. This is consistent with the literature stating that methamphetamine helps some men meet other men and connect socially and sexually with other men (Larkins, Reback, & Shoptaw, 2006). The problem with this way of connecting is that the substance can become associated with intimate social relationships. Many men in this study made that link, and once that link is made, it is hard to change or break.

Some of the men started using substances because of trauma, and it makes sense that some people (gay and straight) who have experienced trauma may turn to substances and risky sex as a way to cope with their trauma. While this study did not point directly to reasons this may be the case for the men interviewed, the content of the interviews suggests some possibilities. Men who have experienced sexual trauma may have had a fear of intimacy; the use of substances may have dulled this fear, or even completely rid the man of the fear while high. Further study can usefully explore the relation between sexual trauma, substances and the potential fear of intimacy.

Intimacy vs. Intensity? Larkins et al. (2006) found that methamphetamine users sometimes acquire the false belief that sex will not be fulfilling without methamphetamine.

These men may have confused the physical intensity associated with methamphetamine-induced sex with emotional intimacy; this confusion would need to be addressed in treatment. The vast majority of men in this study reported that sex was less intimate while on substances; however,

they also reported that sex was more intense. Many of them report doing things while high that they would not do while sober — anal sex, watersports (urinating on one or both partners), and bondage domination sadomasochism (BDSM). Might these men be seeking intensity without intimacy? If so, treatment programs for gay men will want to talk about these desires directly, and consider alternative ways to fulfill them.

What is it About Particular Situations that Make Them Associated with Substance Use?

These men associate certain situations with substance use. The Internet was comfortable and convenient, and meeting online led to substance use because hooking-up was associated with the desire to get together for sex and using substances, known as "Party and Play" (PNP). Grov et al. (2007) found that using the Internet for hooking-up is associated with higher substance use. In the present study, the Internet was the most used situation for both drugs and sex, perhaps because it provides a layer of protection and initial anonymity. The other situations provide fewer layers of protection and less initial anonymity. Some men expressed the desire for anonymity, some even saying that when PNPing, names may not even be exchanged, much less any other more personal information.

The second most reported situation was sex parties. Although in the literature reviewed, sex parties were not as common as bathhouses/sex clubs (Mimiaga et al., 2010; Grov et al., 2013), they were popular with participants in this study because of the availability of substances and the ease of finding sex partners, as there are multiple people at these locations, all there for the same reason (Mimiaga et al., 2010; Grov et al., 2013). The men interviewed in these studies were more likely to go to bathhouses than sex club, for drug use and for sex. Bathhouses have private rooms for using substances with other men, in addition to having sex. At sex clubs, it was much more challenging to use substances because it is an open area with no private rooms.

However, in the present study, that was not the case. This could be because the Internet was the most used situation, and most men that attended sex parties found them online.

The situations were not what led these men to use substances, however. Cognitive expectancies were the true motivator: the men went into certain situations expecting to get high and to have sex. This expectation is what seems to create the false sense that situations, sex and substances are intertwined.

Does Fear of HIV or Other STIs Lead Gay Men to Seek Treatment?

None of the men who were interviewed felt that distress caused him to go into treatment. They said that they sought treatment due to either work or family pressures to go into treatment or because there was a personal feeling (perhaps unacknowledged distress) that treatment was needed. Some of the men experienced many problems with substance use before they sought out treatment for the first time.

Only half the men who were interviewed opted to disclose HIV status before having sex with a new partner. One man said it was his belief that disclosure was the other partner's responsibility, and not his own. This shows a lack of care and concern for one's own physical and mental health. This is reminiscent of the some of the men's attitudes towards condom use. Both show a deficit in caring about one's own health and the risks being taken. This is significant, because this may be an indicator of the self-worth and confidence level of someone that uses substances and has risky sex based on the need to "fit in" or to "be accepted." The data show that this desire for community and a sense of belonging is important, particularly for men who feel lonely. Seen in this light, the pervasive lack of disclosure may be due to fear of rejection — of not being accepted or fitting in.

To What Extent are Current Treatment Programs Helpful to Gay Men?

Overall, the majority of the men interviewed agreed that gay-specific substance abuse treatment is necessary. The men felt that current treatment models do not focus on what gay men experience that leads to using substances. It is important in treatment to find ways to replace the connection with other gay men through drugs with connection through something that is healthier. A gay-centered treatment that addressed this would be more appropriate than a standard treatment used across genders and sexualities.

In addition, several men had negative early experiences with religion (mostly because of their sexuality), and attending groups with an inherent religious/spiritual component was not comfortable or helpful to them. The requirement, in all treatment programs that the men had been a part of, to attend spiritually based 12-step groups (such as Alcoholics Anonymous or Narcotics Anonymous) led nearly every man to drop out of previous treatment and eventually relapse. These programs mandate abstinence, while many non 12-step style groups use concepts of harm reduction and motivational interviewing, as well as incorporating the stages of change model. By doing this, these groups may be more attractive to some gay men.

A majority of the men who had been in substance abuse treatment expressed negative or ambivalent feelings about the treatment experience. Bear in mind, though that the denigrating of treatment programs when it has been unsuccessful is necessary to reduce cognitive dissonance — I went to treatment, I did not stop using; therefore, it must be that the treatment was not effective and it is not my fault. For an industry that is built on helping people, this seems like a sad outcome. One negative component of some treatments was the "marathon" in which participants are asked to discuss traumas from their past. Although there were no heterosexual men or women interviewed for this study, heterosexuals with trauma histories are likely to have difficulties with

these "marathons" if they feel they must revisit the traumatic memories and reveal them to others. However, the experience may be particularly uncomfortable for gay men in a mixed group, whose traumas may include same-sex molestation and same-sex rape. Recognizing this negative impact of an intervention underscores the need for both staff and counselors at these treatment programs to have training in gay-affirmative therapy and treatment models. By doing this training, programs can be modified to ensure that re-traumatization is much less likely to occur for the gay men in treatment.

Five of the six men who had been in treatment stated that gay-focused treatment would be more beneficial. All of them felt that gay-focused treatment would help because it would focus on what leads gay men into substance use and sexual risk-taking. These risk factors are different for gay men than for heterosexual men, according to the participants (all but one, who disagreed). Findings of the study suggest that trauma, low self-worth and low self-acceptance lead these gay men toward using substances with sex; then, attitudes towards condoms, and the intensity/intimacy of the sex that happens while on substances lead to unsafe sex. While some of these could also be risk factors for anyone who gets involved with substances, this study can only provide information about gay men. One important distinction between heterosexuals and gay men also involves the consequences of condom use. In a heterosexual sexual encounter where the man does not use a condom, a woman may get transmitted an STI, it is far less likely that it may be HIV. In a gay sexual encounter where a condom is not used, it is a higher risk that HIV could be transmitted.

Treatment for gay men that is specific to their needs is an important step; a majority of the men in this project felt such a program would have been more helpful to them. Since sex and substance use appear to be intertwined for some gay men, treatment needs to help gay men separate sex and substance use. If this separation can take place, relapse may be less likely. As discussed in the literature review, there are treatments that are designed for gay men and their treatment needs. Studies conducted by Reback and Shoptaw in the late 1990's to the mid-2000's led to the development of a manualized treatment called *Getting off: A behavioral intervention for gay and bisexual male methamphetamine users*. This manualized treatment is based on Gay Specific CBT, and showed good results by tailoring treatment to the specific needs of gay men. While this is a start, more should be done. Reback (personal communication, 2014) does not know the extent that the manualized treatment is being used across the nation.

Unexpected Findings

One surprising finding from this project was the relatively small use of club drugs such as MDMA and GHB. This may be explained by the recognition that the majority of the men recruited for this study were from the Internet, and did not endorse much club or party activity. Theodore et al. (2014) suggest that even when in clubs, it is methamphetamine that is most strongly associated with risky sex occurring shortly after attendance at party venues. MDMA was not a predictor of risky sex. Theodore et al. (2014) suggest that MDMA leads to more intimacy-based sex, in contrast with methamphetamine, which leads to sex that is more emotionally disconnected.

Another unexpected outcome was that only a third of the men interviewed reported having used erectile dysfunction (ED) medications in association with substance use. This is somewhat inconsistent with a study conducted by Drumright et al. (2006) which found substances combined with ED medications were associated with increased sexual risk taking; however, the men in this study did not seem to follow that pattern. The reason that this is unexpected is that some men reported what they called "meth dick" which was that the penis

would not get completely erect and this would become frustrating. It would seem to make sense that this would lead these men to use ED drugs, which do increase blood flow to the penis. It was unclear from the interviews why more of the men did not use ED drugs. One possibility was that many men might not have ready access to costly ED medications. Alternatively, they may be embarrassed to ask for them, since this may cause their doctor to know this is substance use and not for a medical cause.

Limitations of This Study

The interviews contribute to our knowledge of substance use and sexual risk-taking by providing personal narratives of the reasons gay men becoming involved with substance use and sexual risk-taking. However, my inexperience likely influenced the extent to which participants were willing to share. It was possible to go off-script in the interview, which did happen; however, the wording of the questions may not have encouraged enough sharing from some of the participants. There were times that I had difficulty asking certain questions, or delving deeper into a question. This was definitely something that I noticed about my inexperience and how I may have missed opportunities. This possibly influenced the exploration of race/ethnicity and that intersection with sexuality. This intersectionality could give additional clues into some gay men's use of substances and possible sexual risk-taking. It may be wise to explore more of the complexities and nuances of this pattern.

Another limitation of this study is that nearly every man interviewed fell into two age groups, 30-39 and 50-59. It is difficult to generalize the results to younger (18-29) and older (60+) gay men.

While themes were established to interpret the interviews, only one researcher interviewed the participants and coded each interview. This project would need to be replicated

with additional raters to establish reliability. Only 12 participants were recruited and interviewed. Recruitment was conducted around the San Francisco Bay Area in California, with men volunteering after seeing flyers placed in various locations or from posts on Craigslist.org. These recruitment limitations must be held in mind when considering the generalizability of the findings in this study.

Directions for Future Research

Future research could expand on themes that arose in this research, such as the impact of loneliness, and the distinction between intimacy-based sex and intensity-based sex. The sample was predominantly comprised of white males, and while there was a good representation of men of color there were not enough of any ethnicity to make accurate generalizations for that ethnic/racial group. Future studies may want to sample more widely, to include people of color and people with disabilities. It may also be useful to examine how these findings compare with the perspectives of men in other countries or regions, as this study was limited to just the San Francisco Bay Area. It would also be interesting to address issues of how substance use and sexual risk-taking take a toll on the self-esteem and daily functioning of gay men.

Another topic that arose unexpectedly from the interviews is trauma associated with the beginning of substance use that then leads into sexual risk-taking. In this project, a discussion of trauma was unexpected, and the association between trauma and substance use may be an area to explore further. Some people who suffer traumas in their past are known to use substances and other risky behaviors as an escape, or a way of coping with that trauma and its aftermath. This held true for the men in this study; exploring this further can help to have a better understanding of this association. A further exploration of this topic might also help to explain why this happens only with some people who suffer early trauma, but not all.

An exploration of gay-specific treatment could use further attention. Is gay-specific treatment effective in changing gay men's behaviors regarding sexual risk-taking? Although there has been some research, it should include evaluation of current manualized treatments, and other forms of gay specific treatments, such as treatments for those who may not be comfortable with behavioral based treatments.

Clinical Implications

It is important for clinicians and treatment professionals to understand that gay men have needs for treatment that are not currently addressed. Gay men may be willing to seek out services only if they believe that assistance is available that understands the complexities of their experiences as gay men, particularly in relation to substance use and sex.

Clinicians and treatment facilities seeking to work with gay men need to have sensitivity trainings and information/psycheducation available for staff. Community-specific issues impact gay men differently from their heterosexual counterparts. The men in this study felt it is vital that treatment teams understand what gay men go through that leads them to substance use and sexual risk-taking. If the clinician or treatment team have this understanding, it could help these men feel that someone understands their struggles and can help with the healing necessary to recover and refrain from sexual risk-taking behaviors.

References

- Aguilar, J. P., & Sen, S. (2013). The culture of methamphetamine: Reframing gay men's methamphetamine use. *Journal of Human Behavior in the Social Environment*, 23(3), 370-382.
- Aldridge, G. (2013, July 7). Bug chasing: Men deliberately trying to catch HIV for sexual thrill in astonishing craze. Retrieved August 11, 2013, from http://www.mirror.co.uk/news/uk-news/bug-chasing-men-deliberately-trying-2033433.
- Beck, A. T., Wright, F. D., Newman, C. F., & Liese, B. S. (1993). *Cognitive therapy of substance abuse*. New York City, NY: The Guilford Press.
- Bolding, G., Hart, G., Sherr, L., & Elford, J. (2006). Use of crystal methamphetamine among gay men in London. *Addiction*, 101, 1622-1630.
- Bonell, C., Weatherburn, P., Rhodes, T., Hickson, F., Keogh, P., & Elford, J. (2008).

 Addressing gay men's use of methamphetamine and other substances. *Addiction Research and Theory*, 16(5), 417-420.
- Chen, Y-H, Raymond, H. F., Grasso, M., Nguyen, B., Robertson, T., & McFarland, W. (2013).

 Prevalence and predictors of conscious risk behavior among San Franciscan men who have sex with men. *AIDS & Behavior*, *17*, 1338-1343
- Clutterback, D. J., Gorman, G., McMillan, A., Lewis, R., & Macintyre, C. C. A. (2001).

 Substance use and unsafe sex amongst homosexual men in Edinburgh. *AIDS Care*, *13*(4), 527-535.
- Crawford, J. M., Rodden, P., Kippax, S., & van de Ven, P. (2001). Negotiated safety and other agreements between men in relationships: Risk practice redefined. *International Journal of STD & AIDS*, 12, 164-170.

- Drumright, L. N., Little, S. J., Strathdee, S. A., Slymen, D. J., Araneta, M R G., Malcarne, V. L., Gorbach, P. M. (2006). Unprotected anal intercourse and substance use among men who have sex with men with recent HIV infection. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*, 43(3), 344-350.
- Galletta, A. (2013). Mastering the semi-structured interview and beyond: From research design to analysis and publication. New York, NY: New York University Press.
- Grov, C., DeBusk, J. A., Bimbi, D. S., Golub, S. A., Nanin, J. E., & Parsons, J. T. (2007).

 Barebacking, the Internet, and Harm Reduction: An intercept survey with gay and bisexual men in Los Angeles and New York City. *AIDS & Behavior*, *11*, 527-536.
- Grov, C., Parsons, J. T., & Bimbi, D. S. (2008). In the shadows of a prevention campaign: Sexual risk behavior in the absence of Crystal Methamphetamine. *AIDS Education and Prevention*, 20(1), 42-55.
- Grov, C., & Crow, T. (2012). Attitudes about and HIV risk related to the "most common place" msm meet their sex partners: Comparing men from bathhouses, bars/clubs, and Craigslist.org. *AIDS Education and Prevention*, 24(2), 102-116.
- Grov, C., Rendina, H. J., Breslow, A. S., Ventuneac, A., Adelson, A., & Parsons, J. T. (2013).

 Characteristics of men who have sex with men (MSM) who attend sex parties: Results from a national online sample in the USA. *Sexually Transmitted Infections*, 1-7. doi:10.1136/sextrans-2013-051094
- Guzman, R., Colfax, G. N., Wheeler, S., Mansergh, G., Marks, G., Rader, M., & Buchbinder, S. (2005). Negotiated safety relationships and sexual behavior among a diverse sample of HIV-negative men who have sex with men. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*, 38, 82-86.

- Halkitis, P. N., Moeller, R. W., Siconolfi, D. E., Jerome, R. C., Rogers, M., & Schillinger, J. (2008). Methamphetamine and poly-substance use among gym attending men who have sex with men in New York City. *Annals of Behavioral Medicine*, *35*, 41-48.
- Halkitis, P. N., Mukherjee, P. P., & Palamar, J. J. (2009). Longitudinal modeling of methamphetamine use and sexual risk behaviors in gay and bisexual men. AIDS & Behavior, 13, 783-791.
- Hayes, S. C., & Levin, M. E. (Eds.). (2012). *Mindfulness & acceptance for addictive behaviors*.

 Oakland, CA: New Harbinger Publications, Inc.
- Holt, M., Rawstorne, P., Worth, H., Bittman, M., Wilkinson, J., & Kippax, S. (2011). Predictors of HIV disclosure among untested, HIV-negative and HIV-positive Australian men who had anal intercourse with their most recent casual male sex partner. *AIDS & Behavior*, 15, 1128-1139.
- Jaffe, A., Shoptaw, S., Stein, J. A., Reback, C. J., & Rotheram-Fuller, E. (2007). Depression ratings, reported sexual risk behaviors, and methamphetamine use: Latent growth curve models of positive change among gay and bisexual men in an outpatient treatment program. *Experimental and Clinical Psychopharmacology*, *15*(3), 301-307.
- Kaufman, M. R., Fuhrel-Forbis, A. R., Kalichman, S. C., Eaton, L. A., Cain, D., Cherry, C., & Pope, H. L. (2009). On holiday: A risk behavior profile for men who have vacationed at gay resorts. *Journal of Homosexuality*, *56*, 1134-1144.
- Kurtz, S. P. (2005). Post-circuit blues: Motivations and consequences of crystal meth use among gay men in Miami. *AIDS & Behavior*, *9*(1), 63-72.
- Landovitz, R. J., Fletcher, J. B., Inzhakova, G., Lake, J. E., Shoptaw, S., & Reback, C. J. (2012).

 A novel combination HIV prevention strategy: Post-exposure prophylaxis with

- contingency management for substance abuse treatment among methamphetamine-using men who have sex with men. *AIDS Patient Care & STDs*, 26(6), 320-328.
- Larkins, S., Reback, C., & Shoptaw, S. (2006). HIV risk behaviors among gay male methamphetamine users: Before and after treatment. *Journal of Gay & Lesbian Psychotherapy*, 10(3/4), 123-126.
- Lyons, T., Chandra, G., & Goldstein, J. (2006). Stimulant use and HIV risk behavior: the influence of peer support group participation. *AIDS Education and Prevention*, 18(5), 461-473.
- Lyons, T., Chandra, G., Goldstein, J., & Ostrow, D. G. (2010). Breaking the bond between stimulant use and risky sex: A qualitative study. *Substance Abuse*, *31*, 224-230.
- 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(6), 953-958.
- McVinney, L. D. (2006). Harm reduction, crystal methamphetamine, and gay men. *Journal of Gay & Lesbian Psychotherapy*, 10(3/4), 159-169.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Miller, W. R., & Rollnick, S. (2013). *Motivational Interviewing* (3rd ed.). New York City, NY: The Guilford Press.
- Mimiaga, M. J., Reisner, S. L., Bland, S., Cranston, K., Isenberg, D., Driscoll, M. A., Mater, K.
 H. (2010). "It's a quick way to get what you want": A formative exploration of HIV risk among urban Massachusetts men who have sex with men who attend sex parties. AIDS Patient Care & STDs, 24(10), 659-674.

- Moskowitz, D. A., & Roloff, M. E. (2007). The existence of a bug chasing culture. *Culture, Health, & Sexuality*, 9(4), 347-357.
- Murtaugh, K. L., Reback, C. J., Krishnamurti, T., Davis, A. L., & Shoptaw, S. (2013). Spend today, clean tomorrow: Predicting methamphetamine abstinence in a randomized controlled trial. *Health Psychology*, *32*(9), 958-966.
- O'Byrne, P., & Holmes, D. (2011). Desire, drug use and unsafe sex: A qualitative examination of gay men who attend gay circuit parties. *Culture, Health, & Sexuality, 13*(1), 1-13.
- Petry, N. M., Rash, C. J., & Easton, C. J. (2011). Contingency management treatment in substance users with and without legal problems. *The Journal of the American Academy of Psychiatry and the Law*, *39*, 370-378.
- Prestage, G., Mao, L., Jin, F., Grulich, A., Kaldor, J., & Kippax, S. (2007). Sex work and risk behaviour among HIV-negative gay men. *AIDS Care*, *19*(7), 931-934.
- Prestage, G., Hurley, M., & Brown, G. (2013). "Cum Play" among gay men. *Archives of Sexual Behavior*. doi:10.1007/s10508-013-0074-4
- Rawstorne, P., Digiusto, E., Worth, H., & Zablotska, I. (2007). Association between crystal methamphetamine use and potentially unsafe sexual activity among gay men in Australia. Archives of Sexual Behavior, 36, 646-654.
- Reback, C. J. (1997). The social construction of a gay drug: Methamphetamine use among gay and bisexual males in Los Angeles (Contract #93427). Retrieved February 10, 2014, from http://www.friendscommunitycenter.org/documents/Social_Construction_of_a_Gay_Drug.pdf

- Reback, C. J., & Shoptaw, S. (2011). Development of an evidence-based, gay-specific cognitive behavioral therapy intervention for methamphetamine-abusing gay and bisexual men.

 **Addictive Behaviors*, doi:10.1016/j.addbeh.2011.11.029
- Reback, C. J., Shoptaw, S., Riley, J., & Shone, K. (2009). *Getting off: A behavioral intervention* for gay and bisexual male methamphetamine users (A training manual for counselors).

 Los Angeles, CA: Friends Research Institute.
- Reback, C. J., Veniegas, R., & Shoptaw, S. (In Press). Scaling-up an evidence based intervention for methamphetamine-abusing gay and bisexual men: From research to practice. *Journal of Homosexuality*.
- Ricks, J. L., Chang-Arratia, C., Lansinger, D. J., & Dziegielewski, S. (2010). Men who have sex with men and methamphetamine use. *Social Work in Mental Health*, 8(2), 160-173.
- Santos, G-m, Coffin, P. O., Das, M., Matheson, T., Demicco, E., Raiford, J. L., Herbst, J. H. (2013). Dose-response associations between number and frequency of substance use and high-risk sexual behaviors among HIV-negative substance-using men who have sex with men (SUMSM) in San Francisco. *Journal of Acquired Immune Deficiency Syndromes:*JAIDS, 63(4), 540-544.
- Shoptaw, S., Reback, C. J., Larkins, S., Wang, P-C, Rotheram-Fuller, E., Dang, J., & Yang, X. (2008). Outcomes using two tailored behavioral treatments for substance abuse in urban gay and bisexual men. *Journal of Substance Abuse Treatment*, 35, 285-293.
- Shoptaw, S., Reback, C. J., Peck, J. A., Yang, X., Rotheram-Fuller, E., Larkins, S., Hucks-Ortiz,
 C. (2005). Behavioral treatment approaches for methamphetamine dependence and HIV-related sexual risk behaviors among urban gay and bisexual men. *Drug and Alcohol Dependence*, 78, 125-134.

- St. De Lore, J., Thiede, H., Cheadle, A., Goldbaum, G., Carey, J. W., Hutcheson, R. E., Golden, M. R. (2012). HIV disclosure and subsequent sexual behaviors among men who have sex with men who meet online. *Journal of Homosexuality*, 59, 592-609.
- Theodore, P. S., Duran, R.E., Antoni, M. H. (2014). Drug use and sexual risk among gay and bisexual men who frequent party venues. *AIDS and Behavior*, *18*(11), 2178-2186.
- Van de Ven, P., Campbell, D., Kippax, S., Knox, S., Prestage, G., Crawford, J., Cooper, D. (1998). Gay men who engage repeatedly in unprotected anal intercourse with casual partners: The Sydney Men and Sexual Health Study. *International Journal of STD & AIDS*, *9*, 336-340.
- Wanigaratne, S., Davis, P., Pryce, K., & Brotchie, J. (2005). *The effectiveness of psychological therapies on drug misusing clients*. London, England
- Whittier, D. K., St. Lawrence, J., & Seeley, S. (2005). Sexual risk behavior of men who have sex with men: Comparison of behavior at home and at a gay resort. *Archives of Sexual Behavior*, 34(1), 95-102.
- Zablotska, I. B., Crawford, J., Imrie, J., Prestage, G., Jin, F., Grulich, A., & Kippax, S. (2009).

 Increases in unprotected anal intercourse with serodiscordant casual partners among HIVnegative gay men in Sydney. *AIDS & Behavior*, *13*, 638-644.
- Zule, W. A., Poulton, W. E., Coomes, C. M., Mansergh, G., Charania, M., Wechsberg, W. M., & Jones, H. E. (2012). Results of a pilot study to reduce methamphetamine use and sexual risk behaviors among methamphetamine-using men who have sex with men (MSM) not currently in treatment. *Journal of Psychoactive Drugs*, 44(5), 351-358.



Hello, my name is Nathan Hale and I am emailing to ask if you would be willing to help me out. I am pursuing a doctoral degree in Clinical Psychology at California School of Professional Psychology at Alliant International University. I have a special interest in gay men and sexual risk-taking. I am doing a dissertation on gay men and the sexual risk-taking that occurs when the man has used a substance. I am currently in the process of recruiting participants for my dissertation study. I would like to interview 12 men who self-identify as gay men. I would like to recruit members from this (name of establishment). I estimate that the interview with each participant will take about an hour to a maximum of one hour and a half, and that the interviews will be conducted at my university or at another location that is mutually convenient to the participant and me. The interview responses will be confidential, and I am the only person who will be conducting the interviews. My method of recruitment will entail putting up a flyer describing my study on the premises of your establishment. Does this sound workable to you? **IF NOT INTERESTED:** Well, I appreciate your taking the time to speak to me about this and I would like to offer to send you a copy of the results of my study if that would be of interest to you. **IF INTERESTED IN RECEIVING FEEDBACK:** I will be sure to send you a summary of the results of my study once it is completed. Thank you again. Goodbye.] **IF INTERESTED:** Great, I appreciate your help and generosity. I would like to offer a summary of the results of the study once it has been completed if that would be of interest to you. Thank You.

Appendix B

Establishment Flyer

HELP NEEDED FROM GAY MEN WHO HAVE USED SUBSTANCES AND PARTICIPATED IN SEXUAL RISK-TAKING ACTIVITIES

- Are you a self-identified gay man?
- Are you between the ages of 18-60?
- Have you participated in any sexual risk-taking activities that involved substance use (alcohol and other recreational drugs)?
- If the answer is YES, you are needed for a study exploring the potential associations between gay men, substances, and sexual risk-taking.
- It involves only one interview of an hour to an hour and a half. Participation is voluntary and confidential.

A gift card for \$20.00 will be given after the interview. If interested, please contact Nathan Hale at nhale@alliant.edu or 415-504-3574.

Thank you

Appendix C

Initial email/phone screening script

Thank you for your interest in this study. I am eager to speak with you to provide more information about the study. I will assume that since you responded to the advertisement, you are a gay man between the ages of 18-60 who has been involved in sexual risk-taking that involved substance use. Is this correct?

If, after we talk, you are willing to participate in this study, we will meet for one interview where I will ask you a series of open-ended questions. Our meeting will last 60-90 minutes.

Let me tell you a little about the actual interview process. I will begin by asking you about your participation in activities (such as parties or online) where you may have used a substance and participated in sexual risk-taking. Then I will ask you a bit about your substance use and potential sexual risk-taking. I will also ask you fill out a brief demographic questionnaire before the interview. You will receive a \$20 gift card at the end of the interview as a token of my appreciation for your participation. Do you feel this is something you would be interested in participating in? Again, I greatly appreciate your interest in my study and look forward to speaking with you. Thank you.

IF NOT INTERESTED: Well, I appreciate your taking the time to express interest and I would like to offer to send you a copy of the results of my study if that would be of interest to you.

IF INTERESTED: Great, I appreciate your help and generosity. I would like to offer a summary of the results of the study once it has been completed if that would be of interest to you.

Appendix D

Informed Consent

Consent to Be a Research Participant

This research study explores the potential association between substance use and sexual risk-taking. I will give you a brief demographic form to fill out. Following that, I will ask you a series of questions related to sexual risk-taking and substance use. If you have been in drug treatment, I will ask you about that experience and about the extent that the treatment met your needs.

All information you provide will remain confidential. I will be tape-recording our interview, but your name will not be on any recordings or written copies of the interview or the demographic form. The data files containing the recorded interviews will be kept PGP encrypted when not in use. After transcription, the recordings will be destroyed securely using the PGP Shredder capability. Five years after the written dissertation is completed, the transcripts and any other information will be diamond shredded.

In the final presentation of the findings, I will quote from some of the interviews, but I will take great care to make sure that there is no information in any of the quotes that could identify you.

However, there is one circumstance in which I cannot keep your identity confidential: if you tell me that you plan to harm yourself or other people, or if you tell me about the abuse of a child, elder or dependent adult, the law requires that I notify the authorities about this information.

It is possible that, subsequent to your participation in this study, you may experience some negative emotions as a result of thinking about memories of risk-taking or past experiences of various kinds. However, participation may also present an opportunity to see the information

in a new and positive way. If you find that you do experience difficult emotions following this study, please contact me and I can refer you to a psychotherapist who will be available for one consultation with you about those emotions, at no cost to you.

If for any reason during this study you do not feel comfortable, you are free to end your participation and your information will be discarded. You will be able to withdraw from the study at any point before the dissertation is completed; after that, the dissertation will be filed and published by Proquest, and it will no longer be possible to withdraw. You are also free to take a break whenever you wish to, and to decline to answer any question if you prefer to not answer it.

Your participation in this study will require approximately 60-90 minutes. If you have any further questions, now or later, concerning this study please feel free to contact me at nhale@alliant.edu, or my committee chairperson, Valory Mitchell, Ph.D., at mailto:wmitchell@alliant.edu. Your participation is strictly voluntary. Please indicate with your signature on the space below that you understand your rights and agree to participate in the research.

For further questions about the rights of research participants, contact the San Francisco Institutional Review Board of the Protection of Human Research Participants at Alliant International University at IRB-SF@alliant.edu or (415) 955-2151.

 Check here to indicate that you received a copy of this consent form
 Check here if you would like to receive a summary of my findings.
Send by mail (include your address):

Send by email (include yo	ur email address):
Participant Signature	Date
Interviewer Signature	Date

Appendix E

Demographics

Age:	
Race/Ethnicity:	
Relationship Status:	
HIV Status: + or – or don't know	
Highest level of Education Completed:	
Occupation:	

Gross Annual Income:

- 1. Under \$10,000
- 2. \$10,000 to \$20,000
- 3. \$20,000 to \$30,000
- 4. \$30,000 to \$40,000
- 5. \$40,000 to \$50,000
- 6. \$50,000 to \$60,000
- 7. \$60,000 to \$70,000
- 8. \$70,000 to \$80,000
- 9. \$80,000 to \$90,000
- 10. \$90,000 and above

Appendix F

Interview Questions

Hello, my name is Nathan Hale, and I would like to thank you for taking time to take part in this interview. I am a graduate student in the field of clinical psychology. I want to give you a bit of an overview of what we will be talking about during this interview.

The interview should take between 45 to 90 minutes. The purpose of this research study is to gain information about gay men, substance use, and the possible association with sex and treatment you may or may not have gone through. I will ask you questions about substance treatment, situations that may lead to substance use and possible sexual risk-taking; I will also ask you about your own sexual risk-taking and substance use. If at any time in the study you are asked a question that you do not want to answer, simply state—I do not wish to answer that, and we will continue, no questions asked. There may be questions that do not apply to you; that we can skip also. I will be digitally recording this interview for the purpose of transcription and data analysis. At the conclusion of my study, I will destroy the recording(s) of our interview.

Treatment:

- 1. In the past year, have you been in treatment for substance use/abuse? If yes, continue with treatment questions.
- 2. 2. What caused you to go into treatment?
- 3. 3. What was your experience of the treatment you received?
- 4. Do you feel that the treatment you went through focused on specific issues that relate to gay men and the reasons some of them use substances?
- 5. 5. Was the treatment program that you were in outpatient or inpatient? How long was that program?
- 6. Was this your first time in treatment? If not, how many other times have you been in treatment?

- 7. Do you think that substance treatment that is specific to gay men would be better than other treatments? What do you think treatment programs would need to include to make gay male specific substance treatment effective for yourself and the gay men you know?
- 8. Are you familiar with Tweaker.org or other sex-on-meth campaigns? If yes, have you seen the site or the site's ads?
- 9. Did Tweaker.org or other sites make a difference in your use of substances, and/or unsafe (that is, unprotected) sexual activities?

Gay Men and Substance Use:

Now I'm going to shift our focus and ask you some questions about gay men and substance use – here I am thinking of both alcohol and any types of (legal or illegal) recreational drugs.

- 1. In the past year, have you used any substances? If yes, please tell me what substances, how often, and how much?
- 2. Have you had sex with a casual partner while on substances in the past year? If yes, can you give me an idea how often this has happened in the last year? Is there a typical pattern of substance use that goes with your having casual sex? If so, can you describe it, and if not, can you give me a general idea of which substances and how much of them you have used in the context of casual sex over the past year?
- 3. When having sex while on substances in the past year, how often did you use a condom?
- 4. Have you used erectile dysfunction drugs while on substances in the past year?
- 5. Do you feel that using substances while having sex leads to a more or less intimate experience?
- 6. When having sex on substances, do you engage in sex acts that you would not do while *not* on substances? If so, please briefly explain.

- 7. In the gay male community, how common do you think it is for men to drink or use drugs on occasions when they have sex with a casual partner? Do you think that drinking or drug use affects most gay men's willingness to have sex without a condom?
- 8. Finally, if you knew a young man who was just entering the gay community, what advice would you give him about safe sex and about what you know about association of sex and drugs?

Situations of Substance Use and Sexual Risk-Taking:

Again, when I ask about substances this includes alcohol and other recreational substances.

- 1. In the past year while on vacation did you:
 - a. Use substances? If yes, please tell me what substances and how much?
 - b. Have casual sex? If yes, did you have sex while on substances and did you use a condom each time?
- 2. In the past year, have you gone to a Circuit party? If yes, did you use substances at the Circuit party?
- 3. In the past year, have you gone to a bathhouse or sex club? If yes, did you use condoms while having sex? Did you use substances at the bathhouse/sex club?
- 4. In the past year, did you attend a sex party?
- 5. Was the sex party a condom-friendly or condoms-required sex party? If no, was HIV status required to be disclosed prior to or at the sex party?
- 6. In the past year, have you met a casual sex partner on Craigslist.org, Manhunt, Adam4Adam or other online Internet sites? If yes, did you use substances with that casual partner? Condoms?

- 7. In the past year, have you met a casual sex partner on mobile apps such as Grindr, Krave, BoyAhoy, or Cruzr? If yes, did you use condoms? Did you use substances with that casual partner?
- 8. In the gay male community, how common do you think it is for men to go to sex parties? Circuit parties? To go to a bathhouse? How common do you think it is for men to meet casual partners online or through a mobile app?
- 9. In each of these settings sex parties, Circuit parties, bathhouse, online or through mobile app connections - how common do you think it is for men to use drugs/alcohol? For men to have sex without condoms?

Sexual Risk-Taking:

- 1. When was the last time you had casual sex in the past year?
- 2. When you have casual sex, do you have anal sex?
- 3. How often did you have casual sex in the past year?
- 4. Think back on your casual sex encounters over the last year; approximately what percentage of those times did you disclose your HIV status to your casual partner?
- 5. How often did your casual partner disclose his HIV status to you?
- 6. How difficult is it for you to disclose your HIV status? Does it feel difficult or awkward to disclose your HIV status to a casual partner?
- 7. When you have anal sex with casual partners, do you consider yourself a top, a bottom, or versatile?

8.	Think back on your casual sex encounters over the past year; approximately what percentage of those times did you "bareback," meaning, have sex without a condom?
9.	Do you consider yourself a barebacker?
10.	What are your personal feelings toward condom use?
11.	Have you had casual sex with someone of the opposite HIV status in the past year?
12.	Did you use a condom with that casual partner?
13.	(If interviewee has had UAI-C) When you had sex without a condom with a casual partner in the past year, were you a top or a bottom? Was that position influenced by your casual partners disclosed HIV status?
14.	What do you consider sexual risk-taking? Give some examples, please.
15.	Do you know what the term "cum play" refers to?
	(If yes) What type of "cum play" have you participated in with a casual partner over the past year?
	(If no, explain "cum play.") Over the past year did you participate in any activities like those just mentioned with a casual partner?
16.	In the gay male community, how common do you think it is for men to have casual sex? How common do you think it is for men to have sex without condoms? How common do you think it is for men to disclose their HIV status to a casual partner?