

**EXPLORING THE MOTIVATIONS, ATTITUDES, BELIEFS AND INTENTIONS  
OF  
MEN WHO HAVE SEX WITH MEN FOR ACQUIRING SEX PARTNERS**

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**Abstract**

This study explores the sexual motivations, attitudes, beliefs and intentions (MABI) of men who have sex with men (MSM), utilizing qualitative and quantitative research methods. The study uses the theory of planned behavior for its theoretical framework. Qualitative interviews were conducted with 20 men between the ages of 18 and 39 years of age residing in the southwestern Pennsylvania area, who reported sexual activity with at least one male partner in the preceding year. These interviews provided information for the development of a survey instrument to measure response to various motivations, attitudes, beliefs and intentions (MABI) and how these correlate to numbers of sex partners in a twelve-month period along with the number of sexually transmitted infections (STIs) in a lifetime. For the quantitative component, a convenience sample of 150 MSM from a variety of venues was surveyed and the data analyzed through frequency distribution, crosstabs, correlations, factor analysis and logistic regression. Sample size and the number of variables created the need for factor analysis. Nine new variables related to MABI were created. Association between these variables and a series of key outcomes were assessed. Outcomes include low number of sex partners in 12 months (<4), no STIs in a lifetime, and no intention to have an open relationship. Results indicate that physical and emotional trust are

significant predictors of a low number of sex partners in a twelve-month period considered, no lifetime STIs, and never having an intention to be in an open relationship. The public health relevance of this study is that an increased understanding of what drives the sexual partnering of MSM will provide the basis for improved HIV and STI prevention programs.

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## 1. INTRODUCTION

*Human mating behavior delights and amuses us and galvanizes our gossip, but it is also deeply disturbing. Few domains of human activity generate as much discussion, as many laws, or such elaborate rituals in all cultures. Yet the elements of human mating seem to defy understanding (Buss, 1994, p.1).*

Managing HIV disease remains one of the most significant challenges to public health. This challenge includes halting the rising prevalence of HIV in the United States as well as globally. According to the 2008 UNAIDS/WHO AIDS epidemic update, at the end of 2008, 1.2 million children and adults (range .69–1.9 million) were living with HIV in the U.S. (WHO, 2009). *The Journal of the American Medical Association (JAMA)* showed that in 2006 (the most recent year for reporting HIV data) there were an estimated 56,300 new HIV infections in the United States (Hall et al., 2008). Incidence remains stable but the new estimates provide a profile of HIV/AIDS in the United States that young males and African American men who have sex with men (MSM) are the ones who are primarily affected (National Prevention Information Network (NPIN), 2010). The public health challenge is to reduce this incidence, and ultimately, the prevalence of HIV.

Prevention and treatment are two distinct facets of this challenge. The difficulties presented for prevention efforts are many and varied, with some efforts variously addressing the need for multi-level program interventions targeting individuals, social networks and community and social structures. One of the reasons for these multi-level programs is the wide variety of subpopulations within the MSM population, each requiring targeted prevention messages. The Centers for Disease Control and Prevention (CDC) is providing financial and technical support for a number of programs, such as disease surveillance, HIV antibody counseling, testing and

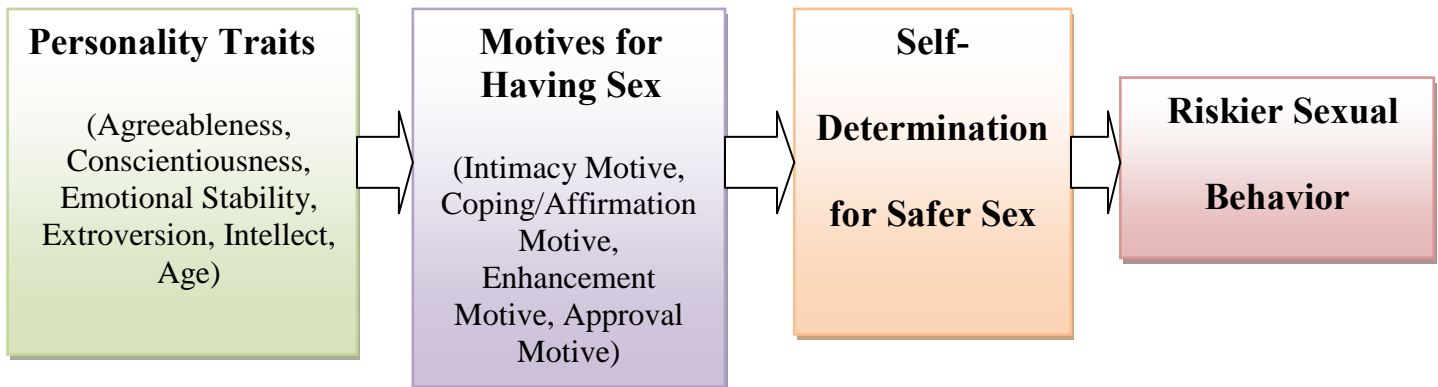
referral services, street and community outreach, risk-reduction counseling, prevention case management, prevention and treatment of other STDs, public information and education, school-based AIDS education, international research studies, technology transfer systems, organizational capacity building, and program-relevant epidemiological, socio-behavioral, and evaluation research (NPIN, 2010). In spite of the support the CDC offers nationally, the prevalence of HIV disease, especially among MSM, continues to rise. Rates of new infections are rising for young MSM. New prevention interventions are needed that are based on new and broader epidemiological information.

The prevention of HIV is a multi-faceted issue and demands a comprehensive approach, including surveillance, research, prevention intervention and evaluation. This approach was adopted and approved by the CDC in 2006 and in part includes the use of National Dissemination and Health Marketing of Evidence-Based Interventions (DEBI). These programs are developed through the CDC in partnership with state and local departments of health, as well as community based organizations throughout the United States. They address many interpersonal factors associated with sexual behavior on many levels, including those at cultural, community and individual levels (CDC, 2009). In spite of the majority of efforts included in these DEBI being targeted to reduce the numbers of sex partners and increase safer sex practices, none of these programs addresses the internal processes driving sexual behavior. This may be due to the lack of studies of the internal processes that underlie the acquisition of sex partners by MSM as well as heterosexual men. Yet, there has been a myriad of studies reporting high number of sex partners as a risk factor in the transmission of HIV (Ostrow et al., 2007; Hughes et al., 2001; Finer, Darroch, & Singh, 1999; Parazzini et al., 1995).

The few studies that have been conducted in relation to the acquisition of sex partners for heterosexual men and women have focused primarily on how the choices related to dating pertain to marriage or procreation. Some of these studies have attempted to explain the sexual motivation of heterosexuals from the perspective of the interplay of psychosocial and biological development (Rose & Rudolph; 2006; Koehler & Chisholm, 2009). Studies of same sex dating have examined dating patterns according to heterosexual dating scripts in order to determine if they are similar (Rostosky, Riggle, Dudley, and Comer, 2006). One study has examined the effects of internalized homophobia on dating patterns with same sex couples (LaSala, 2004). These studies point to the reality that the study of sexual partnering and sexual behavior among MSM is diverse and fragmented; most often it is focused on sexual frequency, sexual exclusivity, safer sex practices and biological states rather than the subjective factors driving sex partnering (Homberg & Blair, 2009; Toates, 2009).

There is evidence that the attitudes of MSM who are HIV+ have a significant effect on risky sexual behavior. The type of attitudes MSM have toward HIV may predict differences in how and when they engage in unprotected anal intercourse (UAI) with a partner of unknown or negative HIV status. Fishbein et al. have stated that “MSM’s intentions to engage in a particular set of sexual behaviors, varying considerably in AIDS risk, were significantly predicted by attitude and subjective norms...attitudes were the more important determinant of intentions to engage in intimate sexual behavior” (1992, pp.1008-1009).

A general model of motivation related to safer or riskier sexual behavior has been developed. This model combines personality traits, motives for having sex and motivations for safer sex in an attempt to predict risky sexual behavior (see Figure 1).



**Figure 1 – Predictive Model of Riskier Sexual Behavior**

(Ingledeew & Ferguson, 2007)

This model underscores the importance of and variety of motivational factors in the formation of risky sexual behavior. In this model partner acquisition is driven by personality traits such as agreeableness and age, and these influence various motives for having sex. The motives for having sex are mitigated by the motives for safer sex. Therefore, the more an individual is motivated for sex due to intimacy, for instance, riskier sexual behavior will be mitigated by the individual self determination safer sex. If the motivation for safer sex is high, then the assumption is that even though the motivation for sex because of a need for intimacy is high, this will be mitigated by the high motivation for safer sex and therefore the individual will engage in less riskier sexual behavior. This model offers insight into how an understanding of the motives for partner acquisition may be key factors for understanding the link with the transmission of HIV and other STIs. A better understanding of the attitudes, beliefs and intentions in addition to motivations driving sex partner acquisition would improve the efficacy of this model.

## **1. a. RATE OF PARTNER TURNOVER**

Research has shown that as the number of sex partners increases so does the percentage of risk for the transmission of HIV infection [See Appendix A: Table 1]. The relationship of multiple sex partners to any kind of increase of HIV is less direct and more complex than direct causal factors such as unprotected receptive anal intercourse (URAI). Yet these questions remain: “What is the reason that a significant number of MSM with multiple sex partners avoid infection with HIV? What is the difference between these men and the men with a high number of sex partners who do seroconvert?” The research literature is unable to provide answers to these questions.

In an attempt to address these questions, this study will consider the character of sexual partnerships from the perspective of what drives the acquisition of sexual partnership of MSM. That is, what motivates men to seek a sex partner? What attitudes accompany these motivations? What beliefs help to form these attitudes? And finally, how do motivations, attitudes, and beliefs relate to the intention to acquire a sex partner? Laumann et al. stated in 1994 that: “research prior to the HIV/AIDS epidemic did not emphasize the character of sexual partnerships or even the number of sex partners as an important dimension of one’s sex life” (p.77). In 2010, aside from a couple of seminal works, this is still the case. Therefore, this study explores the motivations, attitudes, beliefs and intentions (MABI) of MSM for acquiring sex partners.

A review of the research literature reveals that partner turnover rates have been understudied, [see Appendix A: Table 2]. The number of sex partners and associated risk for sexually transmitted diseases reported by MSM has been studied more extensively than for heterosexual men. The time has come to study the processes involved in partner turnover and not just count the numbers. A more in-depth understanding of the connection between acquisition of sex

partners, accompanying sexual behaviors, and cases of transmission of HIV will make it possible to develop better interventions to prevent the transmission of HIV in MSM.

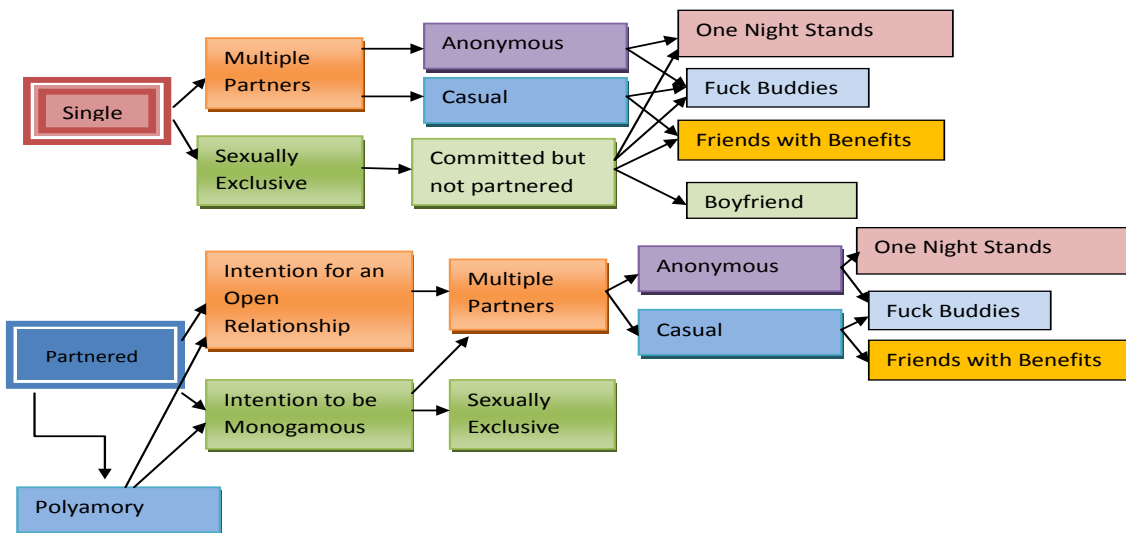
### **1.b. VARIOUS TYPES OF SEX PARTNERSHIPS**

There is a variety of meanings given to the term “sex partner.” There are various types of sex partnerships, with some more readily apparent than others. A sex partner can be the romantic, sexually intimate partner in a same sex or an opposite sex coupled relationship. The couple may be cohabitating and married, not cohabitating and married. A sex partners can be a married person who is in a cohabitating or a non-cohabitating relationship. Many factors such as biology, psychosocial issues, social networks, and substance abuse affect the type and numbers of sex partners a man or a woman acquires. These variables can be cofounders to this study, but will not be considered here because the focus is to explore MABI and then perhaps in future study consider adding these variables to the scope of the study.

Sex partners may be classified as short-term and long-term (Gangestad, & Simpson, 2000; Clark, 2006). Short-term partnerships can be anonymous or casual as well as intimate and committed yet short in length. Long-term relationships tend to be associated with married or cohabitating couples and may hypothetically have a different set of MABI associated with partner acquisition. Married and cohabitating partnerships can be sexually and emotionally monogamous or open to other primary partners or casual sexual encounters concurrent with the primary sexual partner. Another type of sex partnership worth mentioning is partners who are polyamorous. A polyamorous partnership usually includes more than one partner, and all partners are more or less committed to a loving primary relationship with each other, which differs from the typical partnered couple who permit each other extra-dyadic affairs. This type of partnership is generally long-term.



A sex partner can also be anonymous and/or casual and be with a member of the same sex or opposite sex. These are typically short-term partnerships and hypothetically may have a different set of MABI than long-term partnerships. A casual sex partner can be a “friend with benefits.” This kind of partnership is typically between intimate or casual friends who may be long or short-term acquaintances willing to engage in sexual encounters without romance or commitment (Clark, 2006). The “friend with benefits” partnership can be long-term or short-term and again, a different set of MABI may apply to the dynamic of this kind of sexual partnering. A casual sex partner may not be a friend at all but someone whom the person may have known about for a while but little is known about the person or this is a person known only briefly. Thus, many types of partnerships exist, yet little is known about how and what MABI drive these partnerships; even less is known about what drives the sexual partnering of same sex couples. A typology of sexual partnerships for men who have sex with men is provided in Figure 2. This figure has been created by the author of this paper based on interviews conducted for this study.



**Figure 2 - Typology of Sex Partners**

This typology is a graphic presentation of the complex of possible sex partners of a single man as well as a man who is partnered. This typology has been developed from interviews with MSM but may also hold true for heterosexual men. This is not a reflection of the length of relationships, but rather types of relationships and their connections. One interesting feature of this model is the variety of possible sex partners of just one man. A discussion of examples of this typology follows.

A man may have a commitment to a relationship with another person, without having declared or recognized a mutual sexually exclusive partnership, yet have the intention to be sexually exclusive. This same man could also engage in sexual behavior with another man who he may call a boyfriend because he is still “playing the field.” This same man may also have various kinds of casual relationships such as a friend with benefits, and/or a fuck buddy, or other kinds of casual sexual relations, such as one-night stands.

Single men as well as partnered men may engage in casual relationships with different types of partners such as friends with benefits or one-night stands. A friend with benefits is a sexual partnership where each of the men may share some knowledge about each other or share friends and acquaintances, and perhaps even share other non-sexual encounters, such as going to a bar together with a group of acquaintances. In this case, these friends or acquaintances will occasionally engage in sex with each other. The reasons for this will vary. For example, these friends may be in graduate school and working together in a study group and find each other sexually attractive but have no intention of pursuing a partnership or committed relationship at the time. These friends may find themselves in a situation where they are alone and mutually in need of sexual gratification. They may engage in sexual behavior with “no strings attached,” meaning they maintain a casual acquaintance or friendship.

Partnered as well as single men may also engage in anonymous sexual encounters, which may include one night stands or fuck buddies. A one night stand, in terms of this study, means that a man engages in sexual behavior with another man just for one night and the two never expect to see each other or engage in sexual behavior again. For example, a man may patronize a bath house to engage in brief, anonymous, sexual behavior with one or multiple men. In this case, two men may enjoy sex with each other but for a number of reasons, such as fear of admitting to a same sex orientation, one or both of the men may never engage in any conversation other than what is needed to initiate sexual contact and for this one time only. A fuck buddy, on the other hand, is someone who may be anonymous, but someone a man could have regular and many sexual encounters. One reason for this behavior may be that one or both of the men are partnered in what they are telling the committed partner is a sexually exclusive relationship but may not be satisfying, and they seek a more thrilling or sexually satisfying encounter. They may arrange to meet on a regular basis at the bath house for sexual behavior and nothing else. This is only one definition of a fuck buddy, there are more definitions but too many to enumerate here.

### **1.c. ATTRIBUTES OF SEX PARTNERS RELATED TO PARTNER ACQUISITION**

This section draws together some fragments from the multi-disciplinary literature on sexual partnering. It is important to note that the topic of relationship development with a focus on same-sex male partnering lacks major research in the last several decades (Surra, Cray, Boettcher, Cottle and West, 2006). Therefore, little is known about sexual partnering, especially when it comes to single gay males, the focus of this study.

Two major studies have identified primary attributes of sex partners and the relationship of these to sexual partnering: *American Couples* and *The Social Organization of Sex*. MABI for acquiring sex partners have not been the focus of these studies, but the concept of sexual partner

attributes are presented here because they may be possible avenues for future exploration in the development of a survey instrument to explore the MABI that drive MSM in acquiring sex partners. An attribute is defined as a quality or characteristic inherent in or ascribed to someone or something (<http://www.thefreedictionary.com/Attributes>). An example of an attribute of a sex partner related to sexual partnering is age. There is evidence in the research literature that heterosexual men and women who have had sexual partners before the age of 18 are more likely to form an informal monogamous non-cohabitating partnership, with each other, than older men and women (Laumann et al., 1994). The young age of these non-cohabitating partnerships may be related to a casual attitude about sex and sexuality. A short discussion of the attributes of attractiveness, acceptability of sex without love, social and sexual networks, age and sociosexuality is included below.

### **1.c.1. Attractiveness**

A study by Blumstein and Schwartz (1983) has shown that attractiveness of a partner is a major attribute related to sexual partnering. In the sample of heterosexual and homosexual males from this study, 16% of the heterosexual males and 17% of the homosexual males who were monogamous and cohabitating believe their partners should have “movie star” attractiveness. In the same sample, 57% of the heterosexual males and 59% of the homosexual males reported an attitude that their sexual partner be sexy looking. The percentages of heterosexual and homosexual monogamous and non-cohabitating males reported from this study are higher than the monogamous and cohabitating partners. In a study by Reis, Nezelek and Wheeler (1980), evidence is provided that the importance of attractiveness in a sexual partner is important to both heterosexual and homosexual males. In contrast to women, men seek physical attractiveness, youth and sexual characteristics, such as the size of a woman’s breasts or a man’s penis for MSM

and will offer financial security to their partner as a way to obtain what they seek (Child, Graff, McDonnell, McCormick, and Cociarella, 1996). Attractiveness of a sex partner is an attitude driving sexual partnering.

### **1.c.2. Acceptability of Sex without Love**

Another attribute of a sex partner related to sexual partnering is the belief that sex without love is acceptable. A large percentage of monogamous cohabitating heterosexual males (52%) and gay males (79%) sampled believe that sex without love is acceptable (Child et al., 1996). There is a higher percentage with this belief among monogamous non-cohabitating heterosexual males (72%). Also, 24% of heterosexual males in monogamous cohabitating closed marital relations and 32% of heterosexual males in non-married cohabitating relationships have engaged in extramarital sex. It may be that men engaging in extramarital sexual affairs believe that sex without love is acceptable. Considering a large percentage of men believe that sex without love is acceptable, it could follow that individuals with this belief may be more inclined to multiple sex partners. More research is needed to confirm this assumption.

In addition, one study has shown that homosexual males have more uncommitted sex than heterosexual males (Child et al., 1996). Another study reports that a high number of gay males report their involvement in committed relationships (Moreau-Gruet, Jeanin, Dubois-Arber and Spencer, 2001). American Couples reports that only 36% of gay men stated it was important to be sexually monogamous, compared with 71% of lesbians, 84% of heterosexual wives, and 75% of heterosexual husbands (Blumstein and Schwartz, 1983). The number of multiple sexual partnerships can be high with married or cohabitating monogamous couples whether heterosexual or homosexual, depending on the attitudes these men have toward love and sex.

Homosexual male couples are more likely to possess this attitude and have higher numbers of sexual partners.

### **1.c.3. Social and Sexual Networks**

Laumann et al. (1994) have reported that the acquisition of sexual partners happens within tightly defined social networks. These tightly defined social networks do not eliminate the ability to freely choose a sexual partner, but the motivation for the choice of a sexual partner is influenced by friends, family and social settings. Social networks are formed based on socio-demographic characteristics such as age, education, income, race/ethnicity, location and religion. Sexual partnering may appear to be random, but in the structure of a social network is formed according to social rules, norms and morés with the dynamics of socio-demographics. This structure can be referred to as sexual scripts. It is possible to consider that sexual scripts may significantly influence the choice for sex partners. These scripts develop from a dynamic interaction of the individual's biological make-up, social and sexual networks. The assumption here is that the formation of social networks may be a major influence on the MABI for acquiring sexual partners.

Sexual networks emerge out of social networks because they are the links formed from one partnership to another. For example, Partner A has a sexual partnership with Partner B; Partner B has a sexual partnership with Partner C, and so on. A line of many sex partners all connected just by sexual behavior can be formed. Sometimes, Partner C may end up having sex with Partner A. In other words, sexual networks can be a complex and inter-connected map that are not formed in a vacuum but within a social network. For this reason sexual networks can also be called social sexual networks. These social sexual networks involve past experiences, socio-demographics, social rules and norms and are dynamically influencing the choice of a sexual

partner. It is possible that sexual scripts are formed within these social sexual networks and these scripts drive sexual partnering. The assumption here is that there may be particular MABI prevalent in these sexual scripts associated with sexual partnering.

The study of social sexual networks has primarily focused on heterosexual partnering with some attention devoted to same sex partnering (Laumann et al., 1994; Michael, Gagnon, Laumann and Kolata, 1994). A more complete understanding of the dynamics of social sexual networks and the influence on the choice of a sexual partner means the development of improved STI prevention interventions. The reason for this is that the factors driving sexual partners can be modified or mitigated by other motivations, beliefs, or intentions that are protective of STI transmission. It is possible that MABI are significant to sexual scripts and understanding what MABI comprise these scripts and how they dynamically affect the choice of a sexual partner would enhance HIV prevention strategy (Michael et al., 1994).

#### **1.c.4. Age**

Age is another important attribute of a sex partner related to sexual partnering. It has already been shown above that younger age is a factor predicting cohabitation rather than marriage. In addition, two studies have reported that cohabiters differ from married couples in that couples who cohabit have greater differences in respect to religion and age but greater similarity in educational background (Surra et al., 2006; Schoen & Weinick, 1993). This heterogamy in age is related to evidence that cohabitation is less stable and not always a “dating” step to marriage. From a review of the literature, Steinman (1990) concludes that there is a strong tendency for men, regardless of sexual orientation, to prefer younger partners. The conclusion from this study is that there are definite rewards for younger and older gay men to engage in relationships. Several studies have shown that there is a significant tendency for African American adolescent

males to have sex partners who are older men (Ellen et al., 2005). Age may be a context for a variety of different motivations, attitudes, beliefs and intentions for acquiring sex partners.

### **1.c.5. Sociosexuality**

Sociosexuality involves issues such as sex guilt, social/sexual anxiety, and erotophobia, a term used by psychologists to describe sexuality on a personality scale. Merriam-Webster dictionary defines erotophobia as “a morbid aversion to sexual love or desire” (<http://www.merriam-webster.com/medical/erotophobia>). In 1991 Simpson and Gangestad developed a Sociosexuality Orientation Inventory for the purpose of assessing overt and covert sexual behavior as well as the attitudes a person has toward uncommitted casual sexual behavior. Using this inventory in their 1991 study, Simpson and Gangestad concluded that individuals with “unrestricted sociosexual orientation” have more casual non-romantic sexual encounters, begin sexual activity earlier in their relationships, and engage more frequently with concurrent sexual partners. Simpson and Gangestad also conclude that more permissive or unrestricted sociosexual individuals are less religious, less socially and politically conservative and better educated. This conclusion is supported by a study by Otovich and Sabini (2004) comparing sociosexuality, sex drive and lifetime number of sex partners. Those individuals with a “restricted sociosexual orientation” have fewer sex partners and desire more closeness and familiarity with a person before engaging in sex.

An assessment for sociosexual orientation may provide a good foundation for constructing a framework to determine the MABI of MSM for acquiring sex partners because sociosexual orientation is developed according to the attitudes one has toward sexual relations. The problem with using a sociosexual inventory for this study is that the studies on sociosexual orientation have been biased toward heterosexual partnering. More information is needed on how



sociosexuality can be assessed for and associated with homosexual partnering. An assessment of the sociosexual orientation of MSM could include information about sexual guilt, social/sexual anxiety, sexual satisfaction, desire for sexual diversity and erotophobia, which would provide a better indication of the attitudes MSM have toward sexual relations.

### **1.c.6. Psychosocial Factors**

Psychosocial factors influence partner selection. Some of these factors are self-esteem, self-efficacy, mental health, and cultural morés, which minimize or maximize the intimacy derived from sexual contact with men. This section briefly reports on psychosocial factors related to the male sexual experience as it pertains to partner acquisition.

#### **1.c.6.i. Self-Esteem**

There is considerable literature examining self-esteem and considerable literature focused on sex partners, sex and sex drive alone. Yet when combining the terms self-esteem and sex partners; sex and sex drive in searches of research databases, only a few studies emerged. These studies are mainly concerned with the reduction of HIV transmission, in other words, with risky sexual behavior. One study by Clark (2006) considers low self-esteem as a factor in decreasing or hindering positive behavior and increasing negative behavior. Clark considers low self-esteem to be a motivator for early sexual behavior because of the sense of inadequacy linked with low self-esteem. A way to cope with this sense of inadequacy is to use sexual activity to please others and gain worth or affirmation. It follows that risky sexual behavior would result from an attitude of low self-esteem and therefore lead to higher risk for the transmission of HIV.

Yet, in the same study, higher self-esteem was reported to predict more short-term relationships and dating because of a heightened sense of confidence (Clark, 2006). Gangestad and Simpson (1991) discovered this relationship when they developed a sociosexual inventory

(SOI) to study the inclination of a person to engage in sexual intercourse in the absence of strong emotional commitment. These authors conclude that self-esteem is a strong influence in mate selection. Clark (2006) supported this by reporting that the number of sex partners a man acquires is related to his ability to attract and compete for access to mates. Therefore, higher self-esteem may be associated with higher dating confidence, which influences a man's ability to attract and compete for sexual partners. A meta-analysis of the literature focusing on self-esteem supports this understanding of high self-esteem and increased sexual activity, as it pertains to adolescents. The results of a study by Baumeister, Campbell, Krueger and Vohs (2004) support the conclusion that higher self-esteem can indicate increased sexual activity but refutes the idea that low self-esteem indicates more sexual activity.

The results do not support the idea that low self-esteem predisposes young people to more or earlier sexual activity. If anything, those with high self-esteem are less inhibited, more willing to disregard risks and more prone to engage in sex. At the same time, bad sexual experiences and unwanted pregnancies appear to lower self-esteem. (p.3)

It would seem from these conclusions that self-esteem can either influence sexual behavior or is influenced by sexual behavior. Low and high self-esteem can motivate adolescents to engage in sexual partnering, leading to riskier sexual behavior. More information is needed in this regard because studies have focused on sexual behavior and not necessarily the formation of sexual partnerships.

#### **1.c.6.ii. Cultural Morés and Male Gender Roles**

We come now to a discussion of the cultural morés dictating male gender roles and how these gender roles influence the behavior of MSM related to sexual partnering. Traditionally, masculinity has been grounded in a heterosexist model. This has created a stigma related to homosexuality which is intensified by beliefs and attitudes about masculinity that lead to a

perspective that a gay man is not a real man or less than a man. Therefore, male gender roles may be a key factor in the development of social networks, sexual networks, sexual scripts, sociosexuality and other aspects of sexual development of MSM. One study reports that:

Concerning attitudinal correlates, Walker, Tokar and Fischer (2000) found sociosexuality in men was associated with a variety of attitudes related to sexism and traditional masculinity: men scoring low on sociosexuality were more likely to believe in sex role egalitarianism, to hold liberal feminist attitudes, and to seek to transcend traditional masculinity. Because the concept of masculinity often includes themes of social dominance, aggression and control (Mahalik et al., 2003), these relationships between sociosexuality and masculinity may be problematic (Yost and Zurbriggen, 2006, p.163).

Stigma related to homosexuality is rooted in a belief that homosexuality is a deviation from the normal masculine gender role. In other words, heterosexual (also referred to as “straight”) men are masculine and gay men are feminine (Phua, 2002). This stereotyping seems to affect MSM in their attitudes about their sexual partners. In general MSM embrace the male gender role and seek *masculine* mates as evidenced in the advertisements for sexual partners of MSM. Most frequently MSM advertise for “straight acting” or masculine men (Phua, 2002; Bailey, Kim, Hills & Linsemeier, 1997). This is an eroticization of hyper-masculinity by gay men and could be related to the stigma associated with homosexuality. It is possible that MSM have been influenced strongly by the prevailing model of masculinity, and this influence may have a negative effect on self-esteem or self-acceptance. The development of some motivations, attitudes, beliefs and intentions specific to sexual partnering may be developed from the experience of stigma related to homosexuality.

The stigma of same-sex attraction may have a problematic psychological impact on the development of an adolescent. This psychological impact can have an effect on attracting sexual partners as well as on sexual behavior:

(W)e note that acknowledgement of same-sex attraction, even to the self, has a psychological impact on an adolescent in that such acknowledgement demands the adoption of strategies for coping with feelings that are stigmatized by society. For some adolescents, coping may involve seeking social support from friends at school and from family members. For others, coping may involve attempts to “pass” as heterosexual or attempts to “compartmentalize” same-sex attractions and heterosexual associations (Galliher, Rostosky & Hughes, 2004, p.242).

An important milestone, then, in the development of any homosexual is the “coming out” process, which means the process by which a gay adolescent admits his same sex attraction and identifies his homosexual orientation to family, friends, or co-workers. This process may take years or days. The coming out process is important and often life changing because the person now sees himself as an integral whole rather than compartmentalized in terms of stigma. It follows that the coming out process will have a significant influence on how men strategize acquiring sex partners. In fact it may be one of the strongest influences. Ridge, Plummer and Peasley (2006) report that acquiring sex partners is a way to cope with homophobia. The study of MSM acquiring sex partners should therefore include an assessment of the degree to which these men understand their own masculinity, whether or not this masculinity fits the “norm,” and what determines this “norm.” Understanding this connection of homosexuality and masculinity and ultimately how this affects the acquisition of sex partners is yet another understudied subject related to the sexual partnering of MSM.

Stigma related to homosexuality varies according to race/ethnicity. Lemelle and Battle (2004) report that the stigma related to homosexuality is higher in the African American community than in other communities. Lemelle and Battle (2004) also report that religion is a factor related to race/ethnicity and stigma; their study concluded that there is a correlation between higher religious affiliation and homophobia in African American males. Therefore another set of MABI may be active in African American MSM as opposed to Caucasian MSM.

### **1.c.6.iii. Mental Health**

An individual's mental health can be assessed as ranging from overall well-being to an acute disorder. In terms of disorder, mental health is determined by assessing measurable symptoms related to emotional and mental stability and functionality generally following the criteria set forth in the Diagnostic and Statistical Manual IV (DSM IV). Common mental health disorders include depression and substance abuse. One study by Mills et al. (2004) of the mental health of MSM compared to the general population of men has shown that men who have sex with men have higher rates of depression and distress. These rates of depression and distress were measured by the use of a commonly used reliable standard (CES-D). This same study also reported higher levels of sexual dysfunction associated with depression and distress (Mills et al, 2004). In addition to this, a number of findings in the literature demonstrate a higher prevalence of substance abuse, childhood sexual abuse and childhood violence among MSM (Stall et al., 2003). Unfortunately, there is no evidence establishing whether or not negative factors affecting good mental health such as substance abuse and depression affect or determine the MABI of MSM for acquiring sex partners. The conclusion could be drawn that substance abuse and depression may be responsible for a set of MABI to acquire sex partners in a way that increases risky sexual behavior.

Depression and substance abuse interact with one another and can affect partner acquisition. Many forms of substance abuse such as injection drug use, alcohol abuse, cocaine, and methamphetamine usage are highly correlated with depression, and a study by Williams and Latkin (2005) reports a higher correlation of depression with higher numbers of sex partners and risky sexual behavior. Acquiring higher numbers of sex partners and engaging in risky sexual behavior may be ways to cope with depression by using sex and sexual partnering as a way to

feel better or cope with the lonely feeling often accompanying depression by connecting with another person for sex.

Evidence linking internalized homophobia with depression and substance abuse in gay men can be contextualized in terms of shame (Igartua, Gill & Montoro, 2003; Williamson, 2000; Meyer, 2003). In other words, measuring for internalized homophobia becomes a way to understand various levels of shame in MSM (Allen and Oleson, 1999). Feelings of inadequacy and non-belonging often accompany shame, and substance abuse may be a way to cope with these feelings. It is entirely possible that internalized homophobia, shame, depression and substance abuse are strongly connected and provide the background for a set of motivations, attitudes and beliefs driving sexual partnership. Most studies focus on higher numbers of sex partners and high risk sexual behavior associated with substance abuse and depression, and studies linking the stigma of homosexuality, shame, depression and/or substance abuse with partner acquisition are non-existent.

#### **1.d. THEORIES ON SEX AND SEXUALITY**

A number of theories attempt to explain the formation and bonds of sexual relationships in human beings. The prominent ones are evolutionary/biological and psychological/sociological theories. Theories emerging from the evolutionary or biological theories are Triver's (1972) theory of sexual selection, Buss and Schmitt's (1993) theory of sexual strategies (SST), conditional strategies and attachment theory (Gangestad & Simpson, 2000). Theories which have emerged from the fields of psychology and sociology are the social exchange theory, script theory, choice theory on sexual decision making (CTSDM) and the theory of planned behavior (TPB). The theory of planned behavior is the only theory to incorporate motivation, attitudes, beliefs and intentions as major constructs.

Much of the focus of these theories has been to explain love and romance between couples and the attraction of men and women to dyadic partnerships, most specifically married and/or cohabitating opposite sex couples. The interesting point about these theories discussed in this study, is the lack of exploration of how the motivations, attitudes, beliefs and intentions driving the sexual partnering of heterosexual men and women. It is important to remember that little has been done with the development, use and ongoing research of these theories to explore the sex partnering and bonding patterns of MSM. One striking exception is the work of Fishbein et al. (1993), which employed the theory of planned behavior to explore how the motivations, attitudes, intentions and beliefs of MSM affect safer sex practice, most particularly condom use. What follows is a brief examination of some psychological and sociological theories related to sexual relationship and bonding.

### **1.d.1. Psychological and Sociological Theories**

#### **1.d.1.i. Social Exchange Theory**

Social Exchange Theory (SET) has been important for understanding the interpersonal perspective of sexual partnering and for spawning a number of other specific theories (Loving, Heffner and Kiecolt self-esteem and sex partners, sex and sex drive -Glaser, 2006). The most notable of these are the theories of interdependence and equity and the investment model (Noller and Feeney, 2006). The interpersonal perspective of the SET is significant for providing a framework for studying partner selection through these four components (Byers and Wang, 2004):

- Rewards and Costs
- Equity/Equality
- Comparison Level
- Comparison Level for Alternatives

These components can be viewed as motivations driving the shared or exchanged factors in a relationship rather than individual motivations such as the need for companionship.

In terms of rewards and costs, relationships are desirable or worth maintaining when there is a higher exchange of rewards over costs. Noller and Feeney (2006) support this by stating that “the rewards partners receive from the interactions in their relationships are powerful predictors of satisfaction with that relationship” (p. 416). For example, attractiveness has been shown to be important for partner selection in men. Therefore, a reward in partner selection is an attractive partner. The more attractive the partner, the higher the reward and the more satisfying the relationship. This may or may not have implications for sustaining the relationship. Fear of rejection would be a cost in partnership selection. This means a man may select a partner based on the perception that this person will not reject him, which may balance the attractiveness reward.

Equity and equality mean the partners perceive the relationship as fair and equal. Byers and Wang (2004) state that “a relationship is equitable when the perceived inputs and outcomes are the same for both partners” (p. 206). Equity is achieved when partners share a similar background such as education, intelligence, attractiveness, or income. With equality, higher satisfaction is achieved because partners have a sense of matching or fairness in the relationship. Rewards and costs are perceived by the individuals in a relationship through comparison levels (Byers and Wang, 2004). The two ways of comparison are between the individuals in the relationship and the perception of the alternatives to the current relationship. According to the SET, individuals have expectations about a relationship as a result of the interaction with the partner as well as perceptions about the possibilities for a relationship(s) outside the existing one.



The literature reveals only one study of same sex relationships using the SET as a framework (Steinman, 1990).

#### **1.d.1.ii. Economic Choice Theory**

An offshoot of the social exchange theory is the theory of economic choice. This theory attempts to explain partner choice based on the rewards and costs of pursuing specific goals (Laumann et al., 1994). These goals are chosen in the face of limited resources. The goals of sexual partnership can be many and varied, ranging from sexual pleasure to financial assistance to the rearing of children. According to this theory, selecting a sex partner involves little prior knowledge of the other's sexual competence. Like many other "products" acquired in the marketplace, one does not know all about the partner's sexual interests, capabilities, and limitations before a match is made (Laumann et al., 1994).

Economic choice theory is rooted in the concept of attitude. Human beings organize their world in part through attitudes that are formed by previous experience. Therefore, this is one explanation for the ability we possess to choose sexual partners with little prior knowledge of them. Attitudes are an important component of the choices people make about sexual goals. How attitudes are formed may be related more to sexual scripts or early development of social networks, which love and romance are more important, than the particulars of the prospective partner. These attitudes can be related to the risk of sexual partnering as well as to the accompanying sexual behavior itself (Laumann et al., 1994). While this theory could be significant as a foundation for a study of the attitudes associated with sexual partners, no studies to date utilize the constructs of this theory as a framework for research on sexual partnering.

### 1.d.1.iii. Script Theory

Closely related to economic choice theory is script theory. The primary construct of this theory is that we unconsciously form a set of rules or scripts to guide the interpersonal realm of sexual partnering. Sexual scripts specifically refer to the cognitive models people use in choosing and evaluating behavior in sexual and relationship contexts (Klinkenberg and Rose, 1994). *The Social Organization of Sexuality* (Laumann et al., 1994), a seminal work on sex and sexuality in the United States, reports that “sexual scripts are learned through interaction with others, and this interaction is clearly shaped by the networks in which we are embedded” (p. 21). *Sex in America* (Michael et al., 1994), another seminal work on sex and sexuality in the United States, reports that, “We find in fact, that sexual behavior is very much like other sorts of social behavior. Without consciously thinking about it, we play by the rules when we choose someone to have sex with” (p. 44).

Script theory expands the individual aspect of the interpersonal focus of the social exchange theory to an awareness of the importance of how social networks form scripts that dynamically drive our sexual decision making. Sexual scripts operate on three levels: cultural, interpersonal and intrapsychic. In this way, sexual partnerships rely to a great extent on social networks, social experiences and social rules (Klinkenberg and Rose, 1994; Michael et al., 1994). Many significant variables influence a social network. These significant variables have been referred to by Laumann et al. (1994) as master status variables. These variables are gender, race/ethnicity, age, education, marital status and religious affiliation. Laumann et al. (1994) have made this statement about these variables.

Each of these characteristics or “statuses” is a basic component of the self-identity of the individuals who possess them, organizes the partnering of social relationships, and organizes people’s understanding of the social world around them....this basic set is both

universally recognized and, in many cases, arguably most salient – hence the master statuses. These three features imply that differences in master statuses are likely to be associated with differences in the scripts to which people are exposed, in the types of choices that people perceive as viable as well as the costs and benefits that they associate with these choices and in the structure of the social networks in which people are embedded (pp. 30-31).

The authors of *The Social Organization of Sexuality* (Laumann et al., 1994) identify these variables as master status variables and they are highly significant in terms of their association with the formation of sexual partnerships.

One example of a sexual script (and one frequently identified) is partner similarity or homophily. *Sex in America* (Michael et al., 1994) reports: “in fact, we usually have sex with people who are remarkably like ourselves, in age, race or ethnicity and education” (p. 44). Research using script theory with same sex couples bears evidence that homophily exists with these couples as well as heterosexual couples. Peplau and Fingerhut (2007) cite Kurdek and Schmitt (1987) stating that, “like their heterosexual counterparts, gay and lesbian couples benefit when their partners are similar in background, attitudes and values” (p. 409).

Unlike many other theories of sex and sexuality, script theory has made reference to same-sex couples and same-sex dating. Klinkenberg and Rose (1994) state that “a public and well-defined cultural script does not exist for same sex courtship as it does for heterosexual relations. Thus it is reasonable to assume that gay men and lesbians will have to draw on a heterosexual model to some extent in developing a variant cultural script” (p. 24). Peplau and Fingerhut cited Klinkenberg and Rose in 2007 stating that “there is some evidence that lesbians and gay men, like their heterosexual counterparts, rely on fairly conventional scripts when dating a new partner” (p. 407). It would seem likely that gay men and lesbians would unconsciously adopt conventional dating scripts and these scripts would be operative for acquiring sexual partners.

The expectation is that same sex individuals would not differ in the use of dating scripts from heterosexual couples. Yet even though same sex and heterosexual individuals may draw on the same dating scripts, a conflict exists because traditional heterosexual dating scripts may not work well with many homosexuals, due to lifestyles created as a result of societal oppression around the stigma associated with homosexuality. Script theory explains a range of activities available to individuals but does little to tell us how individuals make choices from among the various possibilities of sexual partnering (Laumann et al., 1994).

### **1.e. Discussion of Theory and Partner Acquisition**

These theories of bonding and relationships offer some support for the hypothesis that MABI are significantly associated with partner acquisition. Social exchange theory provides support for understanding motivations for sexual partnership formed by the related rewards and costs. Economic choice theory explains how attitudes affect the decision-making process of engaging in sexual partnerships. Script theory provides some understanding of how a variety of MABI may be formed through the influence of social networks.

There are major gaps in how these theories have been applied. The bulk of these theories have a predominant focus on the formation of coupling based on romantic love and ultimately procreation and parenting of children. Yet, an understanding of MABI involved in the acquisition of sex partners unrelated to romantic love is practically nonexistent. The theories focus predominately on heterosexual relationships, so their applicability to homosexual partnering remains unclear.

#### **1.1. Research Design and Specific Aims**

The overarching goal of this research is to explore and describe motivations, attitudes, beliefs and intentions (MABI) related to sex partner acquisition by men who have sex with men (MSM)

through a cross-sectional study utilizing a mixed method approach. The underlying assumption is that MABI drive sexual partner acquisition and some of these MABI - excitement, boredom, stress, or anxiety - may be predictors of higher numbers of sex partners and STIs. The Theory of Planned Behavior forms the theoretical framework for the development of this research and contributes to the creation of an innovative study because the Theory of Planned Behavior has yet to be applied to a study of MSM and partner acquisition. This theory is well supported by empirical evidence.

This study follows a deductive approach employing a qualitative methodology appropriate for gathering perspectives of MSM on the MABI of sex partner acquisition. These qualitative data were used to develop a quantitative measure to test differences in MABI and how motivations, attitudes, and beliefs influence intentions as well as to test the significance of each MABI in predicting behavior, such as engaging in multiple numbers of sex partners and high risk sexual behavior that could lead to acquiring a sexually transmitted infection (STI). This is an exploratory study; therefore, there are a large number of variables to test. The development of the theoretical framework and specific aims for this study are discussed below.

### **1.1.a. Theoretical Framework**

The theoretical framework for this study is the Theory of Reasoned Action (TRA), which forms the core of the Theory of Planned Behavior. The core concepts of the TRA are primarily behavioral intentions formed from Attitude and Subjective Norms. The TRA is now incorporated into the Theory of Planned Behavior with the addition of the construct of Perceived Behavior Control. The core concepts of the Theory of Planned Behavior have been stated by Kok et al. (2007) this way: “people form behavioral intentions based on their attitudes, subjective norms and perceived behavioral control, and these intentions are the most proximal determinants of the

behavior” (p. 410) (Cf. Figure 3). Perceived behavioral control is not considered here because the purpose of this study is to explore motivations, attitudes, beliefs and intentions related to sex partner acquisition rather than the ability or control a man perceives he has in acquiring sex partners. The task of incorporating the construct of perceived control from the TPB is left for further study, because it requires more extensive research than resources allow for this study.

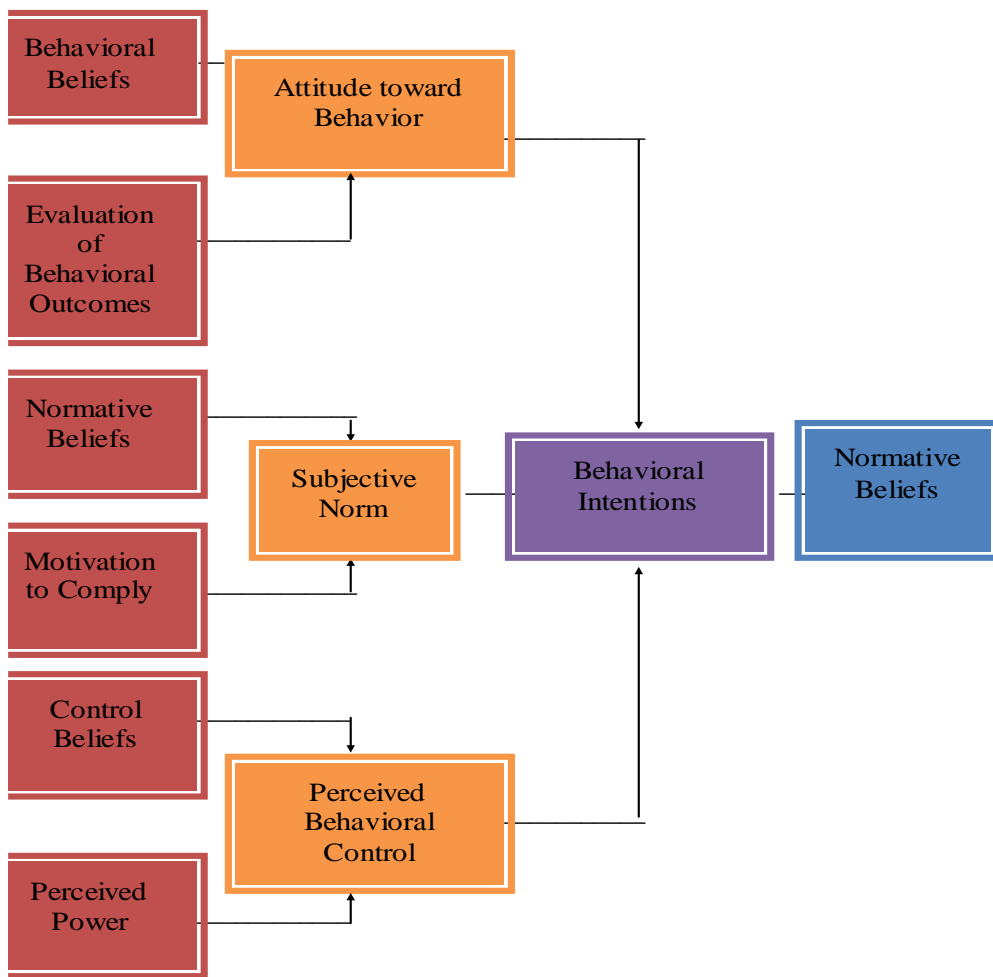


Figure 3 – Theory of Planned Behavior

The Theory of Planned Behavior has been used as a framework for research on safer sex behavior with MSM (Rye, Fisher and Fisher, 2001; Fishbein, 1990; Albarracin, Johnson, Fishbein & Muellerleile, 2001). In his 1990 study, Fishbein (1990) states the following about behavior identification and intentions:

In order to maintain or change a behavior one must know the determinants of that behavior. The more one knows about the factors underlying the performance or non-performance of a given behavior the greater the probability that one can develop successful interventions to influence it...We often confuse goals, outcomes and behavioral categories with behavior...just as one's serostatus is not a behavior, neither is something like practicing safe sex...but when we consider behaviors, it is important to recognize that a full identification of any behavior requires consideration of the **four elements of action, target, context and time** ...Once a behavior has been identified the theory assumes that the behavior can be predicted from the intention to perform the behavior...a person's intention to engage in any given behavior is a function of two basic determinants: one personal in nature and the other reflecting social influence (p.39-40) (*emphasis added*).

The behavior identified for this study is partially identified as "acquiring sex partners." It is important to note that the behavior of acquiring sex partners is only partially identified because full identification of this behavior requires the *action* of actually engaging in sexual behavior along with the *target* of the behavior, the target being another man. The target must be identified in various *time* frames. Time frames are identified in this study as six months, twelve months, and a lifetime. Then to fully identify the behavior it must be set within a certain context. Therefore, the identified behavior for this study is only partially identified because the context of acquiring sex partners is not explored. The reason context is not explored is because the focus of this study is limited to motivations, attitudes, beliefs and intentions of MSM to acquire sex partners. The context of sex partnering should be considered in a more fully developed study.

The key element in the theoretical framework of the TPB is behavioral intention. Intention is influenced by attitude toward a behavior (referred to hereinafter as *attitude*) and by subjective

norms. Attitude is reported both in terms of direct measurement, i.e. the overall way a person evaluates a particular behavior and indirect measurement through the knowledge of behavioral beliefs, which are defined as the beliefs associated with certain attributes or outcomes. Subjective norms are reported by direct and indirect measures. Direct measures are reported by the beliefs a person has about whether the behavior in question is generally approved or disapproved. Indirect measures are the internal motivations to perform a particular behavior based on rather than what others think about the behavior. For instance, a person may believe that others do not approve of engaging in high numbers of sexual partners, but the person may think that this does not matter and engage in this type of behavior regardless of the approval of others. These definitions and the behavioral indicators of action, target and time will guide the formation of this study's specific aims as well as the formation of the survey measures.

### **1.1.b. Specific Aim 1**

The purpose of this specific aim is to probe a section of the MSM population in Pittsburgh, PA to gain their perspectives on the MABI related to sex partner selection. Since there is scant literature devoted to how MABI develop throughout the life span of MSM as well as which MABI influence sexual partner selection, the choice was made to limit the scope of the study and concentrate on MSM between 18 to 39 years of age. This age range was chosen based primarily on the literature on human sexuality and development which indicates this age range to be early adulthood. Early adulthood is and has been for many years considered a time of important life choices where many changes are taking place and behaviors are being set (Masters, Johnson & Kolodny, 1995). The main intention for this aim was to first gather information on which MABI are related to sexual partnering from the perspective of the MSM from the sample population. It was also important to understand which of the MABI identified by these men were most



prevalent for driving sexual partnership. To address this aim, face-to-face interviews were conducted with 21 MSM between 18-39 years of age and who reported having at least one sexual partner in the past year.

### **1.1.c. Specific Aim 2**

This purpose of the second aim was to test four hypotheses by correlation of MABI variables according to age groups, number of sex partners and number of STI's in a lifetime. Correlations were performed utilizing data from the survey developed for this study. The underlying assumption for three of the four hypotheses presented here is that there are differences between the responses to the MABI questions of the older age group compared to the young group. The hypotheses are that the responses, compared between the two age groups, to various MABI will correlate differently with the number of sexual partners acquired in 12 months or a lifetime and the number of lifetime sex partners. The purpose is to better understand if MABI related to sexual partnering change from the beginning of early adulthood to the second half of early adulthood. The aim of the third hypothesis is to test the TPB. The principle of the TPB is to predict the intention to perform a particular behavior by gaining knowledge of personal attitudes, motivations and beliefs. The assumption here is that there are motivations, attitudes and beliefs that will predict either the intention to have an open relationship or to be monogamous.

Descriptions of the four hypotheses tested for this study are presented below.

**H<sub>1</sub>:** In a comparison of MSM 29-39 years of age with MSM 18-28 years of age, the older group will score higher on the following measures of motivation for sex: Excitement, "Horniness," Loneliness, Boredom, Stress, Anxiety, Need for Romance, and Need for Intimacy.

The older group is hypothesized to endorse the following attitudes toward sex to a greater degree than younger men: Sex is for companionship, Sex should be accompanied by emotional trust, and Sex should be accompanied by physical trust. This group is hypothesized to score higher on the desire to please my sex partner.

Older and younger men will also differ on a variety of beliefs regarding sex: I should have all the sex I want, Internet sex is easier, God approves of male on male sex, Sex is only for a committed relationship, and Sex is good.

Difference by age will also appear in the Intentions to have an open or monogamous relationship.

**H<sub>2</sub>:** In a comparison of MABI between groups defined by number of sex partners in 12 months and lifetime, the high sex partner group (>4 and >10 partners respectively) will score higher on the following measures of motivation for sex: Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, Need for Romance and Need for Intimacy than the low partner group (<4, <10 respectively).

The lower number of sex partners group is hypothesized to endorse the attitudes of Sex is for companionship, Sex should be accompanied by emotional trust, and Sex should be accompanied by physical trust to a greater degree than the higher numbers of sex partners group: This group is also hypothesized to score higher on the desire to please my sex partner.

Higher and lower sex partner groups will also differ on a variety of beliefs regarding sex: I should have all the sex I want, Internet sex is easier, God approves of male on male sex, Sex is only for a committed relationship, and sex is good.

The high and low numbers of sex partners groups should also present differences in Intentions to have open or monogamous relationships.

**H<sub>3</sub>:** Controlling for age, the intentions to be monogamous or to have an open relationship will be predicted by 1.) Motivations of Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, a Need for Romance and a Need for Intimacy; 2.) Attitudes of Sex is for Companionship, Sex should be Accompanied by Emotional Trust, Sex should be Accompanied by Physical Trust and the Desire to Please My Sex Partner; and 3.) Beliefs about sex that include: I should have all the Sex I Want, Internet sex is Easier, God Approves of Male on Male Sex, Sex is only for a committed relationship, and Sex is good.

**H<sub>4</sub>:** In a comparison of MSM who report one or more STIs in their lifetime with those who report no STI in their lifetime, the MSM with one or more STIs will score higher on these measures of motivations for sex: Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, Need for Romance, and a Need for intimacy.

The group of men with a higher number of STIs in a lifetime is hypothesized to endorse the following attitudes toward sex to a greater degree than the group with no STI in a lifetime: Sex is for companionship, Sex should be accompanied by emotional trust, Sex should be accompanied by physical trust and the Desire to please my sex partner.

The group of men with one or more STIs in a lifetime compared with the group of men with no STI in a lifetime will differ in a variety of beliefs regarding sex: I should have all the sex I want,

Internet sex is easier, God approves of male on male sex, Sex is only for a committed relationship, and Sex is good.

Difference by lifetime number of STIs should also appear in Intentions to have open or monogamous relationship

## **2. RESEARCH METHODS: QUALITATIVE**

The purpose of this research is to explore partner acquisition among MSM between 18 and 39 years of age by describing some of the motivations, attitudes, beliefs and intentions (MABI) driving sex partner acquisition. This research employs qualitative methods in order to acquire information on the processes driving sexual partnership. The use of qualitative interviews was necessary because the literature dedicated to MABI related to sexual partnering was scant for both MSM and heterosexual men. The open-ended, semi-structured qualitative interviews were used to develop a survey instrument designed to further investigate the responses the men interviewed provided. Survey development depended on this qualitative research in order to ensure that the questionnaire had face validity, cover all relevant content areas, and use language acceptable to the study population.

### **2.1. METHODOLOGY**

Appropriate qualitative methodology was employed for the exploration of sex partner acquisition, of a complex and multifaceted construct, which is not easily quantifiable, especially in the understudied and marginalized population of MSM. The methodology included face-to-face interviews with MSM, recruited from various locations, for the purpose of exploring what MSM consider to be their own MABI for sexual partnership acquisition. These interviews were anonymous and no one was not required to provide his full or real name to the interviewer. A

systematic analysis applied to the interview data sought to generate findings useful for evaluating current understanding from the research literature of the MABI driving sexual partnering, to create a survey to be used for the quantitative phase of the study and to consider the implications for future quantifiable research. The protocol for this study was submitted to the University of Pittsburgh Internal Review Board (IRB) #PRO08090545 and approved as an exempt study based on the study design, which maintains the anonymity of the participants.

### **2.1.a. Recruitment Procedure and Participants**

Twenty-one MSM between 18 to 39 years of age were interviewed one-on-one for this study. Interview participants were primarily recruited by three key community members chosen and trained because of their visibility, trust and familiarity with the gay community. Recruiters were informed by the principal investigator (PI) of the purpose and design of the study, as well as their role in recruiting. Recruiters were supplied with an IRB approved script to use when recruiting men for the study (see Appendix B-Figure 1). Recruiters were then supplied with business cards displaying the PI's contact information. Participants were also recruited by means of a letter mailed from the University of Pittsburgh's Pitt Men's Study to its participants. Flyers were also placed in the Gay and Lesbian Community Center of Pittsburgh (GLCC) and Persad Center, Inc., an independent gay and lesbian counseling center in Pittsburgh, PA. The GLCC also informed its membership about the nature and content of the study through an email distribution as well as by providing contact information necessary to participate in the study.

The interview locations were chosen because of their accessibility, privacy and convenience. Potential participants were instructed to contact the PI, either by email or phone. Once a participant was recruited for the study, interviews were conducted either in a private room at the University of Pittsburgh Graduate School of Public Health or at Persad Center, Inc. and before

the interview began, the PI informed the participants by way of a script containing information about the study and obtained their verbal consent to proceed (See Appendix B – Figure 2). Participants were compensated forty dollars cash payment for a completed interview.

### **2.1.b. Participants**

Seven participants were enlisted by the three recruiters described above, eleven men were recruited from the mailing to the University of Pittsburgh Pitt Men’s Study and three participants were recruited through flyers placed in the GLCC of Pittsburgh and Persad Center, Inc.

### **2.1.c. Interview Questions**

In accordance with qualitative interviewing guidelines, open-ended questions were asked of participants in order to obtain in-depth information about the motivations, attitudes, beliefs and intentions related to how each man engages in sex partner acquisition. Questions were developed in order to provide a guide and a structure for the interview process. The interview questions were developed in an iterative process with researchers from the Center for Health and Sexual Orientation. Participants were informed of the nature and purpose of the study, and that their participation was voluntary and anonymous during recruitment and before beginning the interview. They were also informed that the general timeframe for each interview was one hour. The interviews were an iterative process between participant and interviewer rather than a strict adherence to the list of interview questions. The list of questions is provided here as Table 1.

**Table 1 – Interview Questions**

<ul style="list-style-type: none"><li><input type="checkbox"/> Tell me your definition of a sex partner.</li><li><input type="checkbox"/> Tell me what motivates you to obtain a sex partner.</li><li><input type="checkbox"/> Are there different motivations for different times?</li><li><input type="checkbox"/> Many men have attitudes about many things and certainly about sex and sex partnering. What can you tell me about your attitudes toward sex partnering or obtaining sex partners?</li><li><input type="checkbox"/> Many people have many different beliefs about sex and sex partnering. Can you tell me about what you believe about sex partnering or obtaining a sex partner?</li><li><input type="checkbox"/> When you are going to obtain a sex partner, what are your intentions?</li><li><input type="checkbox"/> In general tell me about your experiences of sex partnering or obtaining sex partners.</li></ul>
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This timeframe varied depending on the participant and the nature and volume of the information provided. Interviews ranged from forty-five minutes to two hours.

#### **2.1.d. Data Collection and Analysis**

All of interviews were conducted by the PI following techniques related to Grounded Theory. “Essentially grounded theory consists of flexible strategies for focusing and expediting qualitative data collection and analysis through a set of inductive steps” (Charmaz, 2003, p. 311). Immediately after each interview the PI noted in a journal the significant material obtained from the interview. This journal enabled the PI to gain insight into improving the direction and depth of knowledge for each upcoming interview. The PI also consulted after the first two interviews with Dr. Martha Ann Terry, a professor at the University of Pittsburgh experienced in qualitative analysis, in order to confirm initial impressions of the data. Dr. Terry provided helpful insight on probing deeper into the areas of sexual partnering and committed relationships. Researchers at the Center for Health and Sexual Orientation at the University Of Pittsburgh Graduate School Of Public Health were also provided information about the interviews after ten interviews had been gathered and transcribed. The interviews were concluded when it became clear to the PI that

information had reached a saturation point, where interviews were no longer revealing new or significant information.

Each interview was recorded with the consent of the participant, using a Sony P-32 digital recorder. The completed interview was downloaded to a computer utilizing the software provided with the Sony P-32 and using this software, the PI transcribed each interview. Completed transcriptions were loaded into Atlas Ti v6 software for coding and analysis. The coding of the data followed accepted qualitative methods. Each transcript was given a first read-through by the PI, gathering an initial understanding of key concepts and information. In this first read-through notes were made about each transcription as a way of gathering general themes. At this point, each transcript was coded using an in-vivo coding process. In other words, codes were developed as each transcript went through the coding process. An extensive coding tree or atlas was established (Cf. Appendix B-Table 2). After all transcripts were coded, adjustments were made such as combining similar codes into a new code and developing several sub-codes were performed. The analysis was guided primarily by interest in sex partner definition, motivations, attitudes, beliefs and intentions related to obtaining a sex partner, and new information related to sex partner acquisition. Coding was directed not only by the frequency of the same code, but also according to the strength and character of a participant response. There may be only one incident of a particular response, but the strength and character of this response may include this response as a primary code. The interview data were also subjected to analysis by another coder, familiar with qualitative data analysis. This provided an iterative process to assess differences in interpretation and perspective. There were significant differences in how data were coded.



The alternate coder focused primarily on the repeating ideas in the interviews which tended to primarily deal with relationships and behavior associated with relationships. A separate codebook was not developed, but a table of key domains and concepts was created. Even with a different focus from the alternate coder there were many similar MABI were found in parallel with those in the code book of the PI for this study. A list of domains for the alternate coding is found in Appendix B – Table 2. Some of the MABI identified are that: sex is motivated by thrill or excitement, attitudes about religion, belief that sex is good, sex is motivated by relief for stress or anxiety, an attitude of self-esteem improving sexual relations, an attitude about trust as significant in sexual relationship, sex is motivated by fun and the intention to monogamy in relationship.

The coding atlas was important for organizing the large amount of information according to the key constructs of the study. The atlas provided the ability to quantify responses according to frequency but the development of key domains and concepts did not rely solely on the frequency of responses. It was also important to consider new or unique information captured in the post-interview notes and notes recorded during the first reading of the transcriptions.

## **2.2. Results**

A number of important results came forth from these interviews. In terms of demographics, seventeen participants self-identified as Caucasian, three participants as African American, and one as Latino. Income and education were not for in this study mainly because these are sensitive and very personal interviews and it was determined that questions about income and education could be perceived as a judgment and perhaps be a barrier to openness in the interview. Still, a majority of the men identified themselves as either in college or college educated. Six participants identified over ten male sex partners in the past year. Nine participants identified

only one primary partner in the past year, but two of these were identified as serial monogamists and they identified one primary partner and over four secondary partners. One of the nine with a primary partner identified his relationship as a long-term open committed relationship.

The importance of enlisting key community leaders and spending time informing them about the purpose and reason for the design study was highlighted by how quickly men were recruited for the interview as well as the diversity and quality of the men recruited for interviews. Key community leaders were able to inject a level of trust and familiarity into the study. This trust seemed to be transferred to the interviewer. This is evidenced by the fact that the questions and nature of the interviews were highly sensitive and yet, the men stated consistently at the end of the interview how comfortable they were and felt very open in their interviews. Many of the interviewees expressed gratitude for the opportunity to talk about many issues related to their sexual partnering habits as well as a sense of relief in participating in the interview. It also became clear throughout the interviews that some of the men have discussed sexual partnering with friends, but the men in general had never given much conscious thought to the MABI associated with their decision making related to sexual partnering. The men stated that the interviews were thought provoking. The results of the frequency of responses, notes taken from the interviews, and transcriptions are shown in Table 2.

**Table 2 – Key Domains and Constructs**

<b>Key Domain</b>	<b>Key Concepts</b>	<b>Types</b>
Sex Partners	Definition of a Sex Partner	Friends with Benefits Anonymous Partners, Dating, Casual Encounter, Monogamous and Exclusive, Online Sex Encounter, More than Just Sex, Companion/Friend
Sex Behaviors	Type of behavior	Anal, Oral, Bottom, Top, Masturbation
Attitudes	Sex is Relational Sexual Freedom	Trust, Self-Esteem,
Belief	Commitment/Investment	Sex is Healthy, Sex better when Partnered
Motivations	Attractions, Body Image, Intimacy, Release of Tension, Sex for Sport	Romance, Loneliness, Love, Horny, Thrill
Intentions	Relationship Oriented	Disappointments in Relations
Early Development	Early Sexual Experiences	Coming Out a Turning Point in Development
HIV/STD		Safe Sex with Condoms

### **2.2.a. Motivations**

Respondents were asked about their motivations and drives for acquiring a sex partner. The most often noted motivations indicated by respondents include sex because of a need for intimacy (n=23), sex for fun or sport (n=23), sex because of a need to release tension (n=17), sex because of attraction (n=11), sex because of body image (n=10) and sex because of love (n=9). Sex because of a fear of rejection (n=2) and because of a fear of HIV or an STD (n=7) were not frequent responses, but were interesting because they presented the possibility of being significant if they could be explored with a larger sample of men. Quotations taken from the interviews about motivations driving sexual partnering are provided below in Table 3.

**Table 3 – Quotations Related to Motivations and Sexual Partnering**

Interview 1	P1: Most of it is motivated by boredom. When I am on a break...If I am sitting around this is nice and I got a little free time on my hands, let's see what is going on online, just a peek. Gosh, I get pissed when people don't respond to my online ads. What, am I not good enough for you slob? I take pride in my pictures and the way they are posed. I get pissed when they don't respond.
Interview 2	Interviewer: Say tomorrow you wake up and feel really alone or empty. Would that be a motivation to go out and get a guy to have sex with? P2: Definitely it has been this way for these days.
Interview 3	P3: There is a need for partnering so to speak. For me I like being in relationships and so sometimes that drives me to develop a sexual relationship with somebody to establish a more personal relationship in some cases. So that is one thing I personally do.
Interview 6	Interviewer: Since you said that, I am wondering the romantic moment of the lust. Is that something that motivates you to want to get a sex partner? P 6: Yeah. I want to say yes. Interviewer: Is it 50 -50 romance and lust or does the romance and lust go together. You know what I mean? P6: I have definitely had attractions to people definitely based on lust but if I am at home and thinking about something and I start to get aroused it is normally tied in to romance. Interviewer: The arousal in you sort of leads you to want to get the romance? P6 – Yeah.
Interview 7	P7: Sex with other people, yeah it was (mumbles) addictive so (mumbles). Interviewer: So it was a way of coping with insecurity? P7: Yeah insecurity. it was partly a way of coping with that.
Interview 11	P11: There are a lot of attractive young guys and that gets me incredibly horny all the time and there is nothing I can do about it so [well] I guess there is not nothing [I could do about it] but that is my big motivator., since I am not really able to date.
Interview 4	P4: It takes a lot for me to make that step myself...the build-up. I have to make sure the situation is right and comfortable. I generally let everything up to the other person. Interviewer: Do you think rejection has something to do with that? P4 - It probably does, fear of rejection.

### 2.2.b. Attitudes

Interviewees reported a variety of attitudes related to sexual partnering and sexual behavior. Most significant, because of their frequency of occurrence, are sex should be safe with condoms (n=23), sex is relational (n=22), sexual freedom is important (n=16), self-esteem is important to sex and sexual partnering (n=10), and finally that physical and emotional trust is important to have when partnering (n=9). Not as frequent but interesting because it was somewhat unexpected was an attitude that when partnering the primary concern is to please the sex partner. Another attitude of interest because it was expected but mentioned only four times was spirituality related

to sexual partnering. Quotations taken from the interviews related to attitudes driving sexual partnering are provided in Table 4.

**Table 4 – Quotations Related to Attitudes and Sexual Partnering**

Interview 3	Interviewer: And it seems like that your attitudes around sex are that you can be pretty free with sex. Umm, it doesn't sound like you have a whole lot of restrictions around sex. P3: I have some. Interviewer: Umm. P3: One is I that I don't have unsafe sex. I should say I only have safer sex.
Interview 3	Interviewer: That's right. So trust becomes a very important part of your attitudes around sex. The sex that I enjoy would have a big component of trust to it. P3: Yes. Trust that they are not going to betray me emotionally. Trust that we are going to be partners. If it is going to be that we are going to be partners in the relationships. If it is not much to trust that. If friends are they going to remain loyal. They are going to be loyal friends. Trust that they are going to be safe. Trust is very important.
Interview 5	Interviewer: So as you sort of get more of a handle on your own self-esteem and more of a sense of yourself and your own identity outside of like a gay identity. It's like my own identity that I feel good about me doing these things, that sex is less of a need for you? P5: (pause) Yes, I would agree with you.
Interview 6	P6: (long pause) I am very much a person that believes that you can't really put any kind of social rules on people or expectations that's like far beyond sex, like just anything in general. So, it's pretty much do as you please as long as you are not hurting anyone, especially me but... Interviewer: Uh huh. So sex really for you is about I'm going out to please myself? P6: Yep.

### 2.2.c. Beliefs

The men identified a variety of beliefs about sex partnering and sex behavior. The beliefs that were considered most significant because of the frequency of response are that commitment or investment in a relationship is vital (n=24), communication is very important when dating or partnering (n=13), sex is better when partnered with another man (n=11), and sex is healthy (n=9) and good (n=6). Three respondents believed that sex was morally bad on some occasions but not always. Other beliefs associated with less frequent responses but expected were that online sex is easy (n=7), sex is a hassle (n=1), and one should have sex with a friend or a peer if pressured to do so (n=2). A response that occurred frequently was the belief that sex should be with a friend or a familiar buddy because sex should be comfortable and safe. Sex with a friend or a familiar buddy was important to some of the men because it was frightening to consider sex

with a stranger. Quotations taken from the interviews related to attitudes driving sexual partnering are provided in Table 5.

**Table 5 - Quotations Related to Beliefs and Sexual Partnering**

Interview 3	<p>Interviewer: You feel I mean... you mean a peer pressure to have sex?</p> <p>P3: Like a pressure from friends who are gay, from uh, (pause) yeah, and also pressure, well kinda of we will just have sex with him or something like, an expectation that but more of an expectation that is always on the table and that why don't you want to have sex with me? We will just have a little sex and there is nothing wrong with it and it's kind of...</p>
Interview 4	<p>Interviewer: It sounds like you are talking about being invested in something more than just sex?</p> <p>P4: Right. Whether it be a friendship or, or, or more of a relationship thing.</p> <p>Interviewer: But there is something more there than the sexual act?</p> <p>P4: Yeah, because for me personally its very hard for me to go through with an act unless there is some kind of a bond there. I have a very hard time staying erect or staying, unless there's connection with that person in some fashion.</p>
Interview 7	<p>Interviewer: It sounds like when you met your partner you really didn't have an intention to, you know, meet this guy, or to be having sexual relationships with guys but the intention was to have a long-term relationship?</p> <p>P7: Right.</p> <p>Interviewer: You said that something shifted in you where you were less interested in having these anonymous hookups but you were not really having the intention to have a long-term sex partner at that point.</p> <p>P7: Right.</p>
Interview 9	<p>Interviewer: Right, (pause), beliefs about sex, (pause), and partnering, I mean it sounds like you have a belief that says that, partnering for the long-term is more satisfying and better, than having multiple anonymous partners?</p> <p>P9: I would have to say yes to that because I, you get something out of a relationship on top of having, or that relationship then you have the wonderful enjoyment of sex.</p> <p>Interviewer: Uh huh.</p> <p>P9: Where I think just seeking a partner for sex it's literally a fling. It's instant gratification that then you throw by the wayside. There is no caring, there is no compassion and no longing in that.</p>

### 2.2.d. Intentions

Unlike motivations, attitudes and beliefs for which a number of each was identified by o main intentions were reported: to be monogamous or to have an open relationship. An orientation to relationship (n=16) and the search for Mr. Right (n=8) were frequently stated but the orientation to relationship or Mr. Right did not indicate an intention to be monogamous. Quotations taken from the interviews related to key responses about intentions driving sexual partnering are provided in Table 6.

**Table 6 - Quotations Related to Intentions and Sexual Partnering**

Interview 1	P1: No I mean, honestly the happiest couples I have seen, the longest relationships I have ever seen whenever it comes to gay men are in a somewhat open relationship. That is what I aspire to. I am with someone I love and trust and want to be with for the rest of my life with but there is an option of sexual freedom.
Interview 4	P4: at which he told me if I need anyone that would be fine. He has always said he doesn't like me being alone. He has never understood why I don't have a boyfriend and why I don't see more people and stuff. He doesn't quite get that because of his life style choice of polyamorous. Interviewer: He is more ..and you accept that about him. P4: Yes, because of what we have formed I have grown to accept it and I am fine with that. We hit if off and it was perfect. I have not really felt that with too many people. Interviewer - so do you feel like this is the man that you could that you could sort of spend your life with. P4: Yes, even if it stays in the situation it is in.
Interview 6	P6: I feel like I should because it seems there's so many ways to look at it and just in our society today it seems that far too many people are very all about getting sex wherever they can, and then again, we're animals so it is kinda hard to imagine that you are going to mate with an animal for life and still have that fire for each other 40 years later. At the same time there is this part of me that wants very much to, when I meet that person who I want to spend the rest of my life with I want there to be this magnet. It's weird that we are the only two in the universe. That I would be enough for that person and they are enough for me.
Interview 8	Interviewer: Okay, in your relationship now do you have an intention or agreement that if you would meet somebody and you thought they were hot, you'd have a sexual relationship with that person? P8: Umm, really yeah, no. I have never really had a dialogue about it. I guess it's never even come up. So I guess it's kinda of, it's kind of understood that we're monogamous. Interviewer: And that means that you don't have sex with other people? P8: Exactly. Interviewer: Yeah? P8: But you know, I would say that if my partner came to me and said he wanted to, or if for me it better be for it to be something that would be open, that is opposed to fulfilling an obligation to the monogamous relationship rather than doing something was out of bounds because for safety that is important. For safety.
Interview 13	Interviewer: If you partnered with someone sexually that this is an exclusive thing, that you are a one man kind of guy and you expect that from the other guy? P13: (pause) Then why have, why be with a person sexually or anything? Why? What is the use? Interviewer: Uh huh. P13: Why waste my time, why waste their time? Interviewer: So this is serious stuff for you? Sex is not something you do for sport. P13: No.

### 2.2.e. Other Findings

The men talked about many aspects of sexual partnering, sexual behavior, MABI related to sexual orientation, coming out, religion and sex, control and giving up of control, and physical, sexual and emotional abuse. It is important to note, because of the number of studies reporting on the higher rates of substance abuse in gay men, that substance abuse or “getting high” was mentioned only infrequently. One possible reason is that substance abuse was not a focus of this study. Most significantly, the men in this study overall self-identified as healthy and free to

express themselves sexually. Critical to this study is the reporting of various types of sex partners by the men, which also influences the various definitions of a sex partner reported by these men.

#### Definition of a Sex Partner

The question regarding the definition of a sex partner resulted in a number of responses, with three different definitions emerging as the most frequent. These definitions are listed here:

- A sex partner is someone with whom I have an intimate and longer-term relationship.
- A sex partner can be someone I know or have some sort of relationship with or a sex partner can simply be a sex object (implying relationship or no relationship, respectively)
- A sex partner is primarily for sexual contact or genital contact.

This result is important because frequent studies survey men about the number of their sex partners and link this number to number of STI in a period of time for the purpose of risk assessment of the behavior of multiple sex partners. If a study asked the question “How many sex partners have you had in the last year?” if the respondent used the first definition listed above then they would only report intimate and long-term partners, whereas, casual or anonymous sex partners would not be included. Therefore, the answer to this question from this respondent may not be what the researcher is looking for. A sampling of quotes from various respondents is included in Table 7.



**Table 7 – Quotations Related to Definitions of a Sex Partner**

Interview 2	P2: What is a sexual partner for me. This part of my life I think I can tell you that I have two descriptions. One is the real one. That is the one I am living. The other is the ideal, the ideal, the people say is the nicer. And the real one is the sexual partner is a guy that I find when at times I am horny or I want to have sex with him.
Interview 3	P3: My outlook on a sex partner is somebody I am dating and having sex with or somebody I am friends with and having sex with, somebody that I may be simply having sex with and that is the extent of our relationship. And that is what a sex partner is to me those three things.
Interview 4	P4: Someone who has gotten close enough to me for me to allow that act to take place in the first place, because I don't do that with just everybody. You have to have a little bit of an entry before I or I have to have a really good feeling with the person before I... Interviewer: So you have to have some kind of relationship established. P4: Generally yes. Interviewer: Uh huh, does that mean, so you wouldn't have, let's say met somebody in the park and have oral sex with them? That just wouldn't be something you would do? P4: No.
Interview 5	P5: My definition of a sex partner? It depends on the context. If it depends on if I am looking to hook up for sex and only sex (pause) I guess the definition of a sex partner would be (pause) I don't think I have much luck in the realm of dating and sex. Sex hookups yes, but generally find, for me, I am trying to change..."
Interview 6	Interviewer: What's your definition of a sex partner or what does that mean to you? P6 – Huh, I would say a sex partner is someone you would have sexual activity with. In my own personal vocabulary, I would normally kinda define it as more of like actual penetration sex, where not so much kinda, groping, making out, stuff like that.
Interview 7	P7: Somebody to have sex with? (Laugh) Interviewer: (laugh) Okay. So would sex be if there were somebody you were kissing, and you were aroused also, would that be a sex partner? P7: I don't think kissing is a sex partner. Jerking off sure.
Interview 9	P9: A sex partner is someone you are highly intimate with. Someone you engage in sexual activity with. You know it's a step beyond intimacy if you know kissing touching, feeling like someone is sexual, you are having intercourse with.

Another interesting finding is the importance of self-esteem connected to dating, commitment and coming out. This is evidenced by ten quotations related to self-esteem in the interviews. One man expressed a feeling of less sexual repression after coming out to family and friends, evidenced by this quote and 21 other references to coming out and sexual behavior in the interviews:

P1: I was out three years before I had sex. You know, I remember how gratifying and that let's see what is the word I am looking for, umm...I just wanted the first time I had sex. OMG YES... I am a gay man and I like doing sex! It was such a...  
Interviewer: Were you having sex when you were closeted at all?  
P1: No, I didn't have sex until the first time when I was twenty.

Also noteworthy about these interviews is that men who are between 20 and 29 years of age remember well their coming out process and early sexual encounters. This could be a result of the intensity of the experience of hiding a same sex orientation in early adulthood. Respondents also reported a turning point in development toward more long-term sex partnership in their mid-twenties after a previous period of frequent sex partners motivated by the thrill and fun of sex. Evidence of this is provided in the quote below:

P9: And in my younger days it was more about finding that soul mate or somebody you could share fun times with, than it was to share intimacy with so...

Interviewer: So sex as you were coming out was like the freedom now to just have a good time?

P9: Kinda.

Interviewer: To enjoy the thrill of sex.

P9: And that is exactly the way it was. It wasn't one of the important factors of finding somebody. So for me sex at a young age was when I would start you know screwing around per se, it wasn't an important factor to me.

Interviewer: The release?

P9: That was enjoyable and it was great.

Conclusions and discussion related to the results from these interviews can be found in Sections 4 and 5. The focus of the study is on MABI. In this case, the various definitions of sexual partnering were unexpected, as well as the creation of a typology of sexual partnerships, and how infrequently attraction and substance abuse were connected by these men as motivations for sexual partnering. Most significantly, the significant number of MABI reported by these men was unexpected.

### **3. RESEARCH METHODS: QUANTITATIVE**

Research in the field of public health directed toward a comprehensive understanding of the MABI of acquiring sex partners for either heterosexual or homosexual populations is non-existent, even though evidence is strong that high sex partner turnover and risky sexual behavior are significantly associated with the transmission of HIV. Much has been written about measuring and defining motivations, attitudes, beliefs and intentions, yet the application of this knowledge to the study of sexual partnering is scattered and scant. This is an initial attempt to gather together what is known in order to begin a comprehensive approach to the MABI associated with partner acquisition. A majority of the evidence is derived from psychological and sociological studies of various motivations, attitudes, beliefs and intentions related to partner acquisition.

#### **3.1. METHODOLOGY**

A quantitative methodology was employed appropriate to the exploration of a complex and multifaceted construct referred to as sex partner acquisition. This is a systematic analysis generating findings useful for the evaluation of the adequacy of the current understanding of sexual partnering, while considering the implications for future research and interventions to improve quality of health for MSM. The protocol for this study was submitted to the University of Pittsburgh Internal Review Board (IRB) and approved as an exempt study based on the

anonymity of the participants (IRB # PRO09070292). This section describes survey development, recruitment procedure, data collection and participant data.

### **3.1.a. Survey Development**

The survey was developed following constructs of the TPB as well as utilizing key concepts and domains obtained from the qualitative interviews. The primary constructs of the TRA are behavior intentions, attitudes, and subjective norms. These constructs were applied to the data provided by the qualitative interviews. A discussion of how the data were operationalized for survey development follows here.

The TPB provides the definition of an attitude as evaluative and meant to act as a mediator or strategy in the actual performance of a behavior. This definition of an attitude provided the measure of attitudes used in the survey. An explanation of the attitudes chosen for the survey is provided here. Sex for the purpose of companionship was chosen because it was not simply a motivation but a way to strategize sex partner acquisition. The presence of physical and/or emotional trust was considered by the men who were interviewed as a way to evaluate the safety and security of acquiring a particular sexual partner. Therefore the perceptions of whether a man could trust this sex partner to be trustworthy in terms of not physically or emotionally harming him are mediators involved in the decision-making process to acquire a sex partner. Fear of HIV was also determined to be an attitude because the knowledge of HIV provides information to evaluate and strategize sexual partnering. This means that a man has pieces of information about HIV that form a fear of HIV and the perception of how HIV might be transmitted through sexual behavior with another man is the way a man may evaluate whether a prospective partner for sexual behavior is safe or not. Depending on the evaluation of the potential sexual partner, the

man will develop a strategy to acquire this sex partner. This strategy may involve choosing this man as a potential committed partner rather than a one-night anonymous trick.

Selecting a sex partner in order to preview a relationship is also considered to be an attitude because the person making a decision to select a sex partner will use a set of pieces of knowledge, such as attraction to the man, whether a friendship can exist, and/or the age of the man. This knowledge provides a perception that is meant to evaluate whether or not this person is suitable for a long-term relationship and at this point may be acquired as a sex partner to further test this relationship for the long-term. The person possessing a desire to please a sex partner is also considered an attitude because this desire is a major component in the decision to acquire a sex partner.

The perception of the self-esteem of the person seeking a sex partner was considered to be an attitude because it is an intrapersonal perspective that guides a number of decision-making processes. In this case, self-esteem is evaluative in the decision about whether the man, who is the target of sexual partnering, is worth engaging in a sexual relationship. Higher self-esteem, as stated earlier in this paper, may indicate the type of partner or the numbers of partner a man may acquire. The perception a man holds about religion or spirituality was considered to be an attitude because it is based on a set of values and beliefs that combine to form a way to evaluate the possible compatibility of a potential sexual partner. Therefore perceptions about religion and spirituality are active in the decision-making process for acquiring a sexual partner.

Subjective norms are directly measured by the beliefs which are formed out of the perceptions others have about a particular behavior. Subjective norms are also indirectly measured by what a person perceives as acceptable or unacceptable about the normative beliefs that others hold. Another indirect measure of subjective norms is the motivations an individual has to comply

with a particular behavior. These motivations are the referential thoughts connected to the behavior which enables action on the behavior.

The measures of normative beliefs for this study were developed from the qualitative data from this study, which provided statements about the acceptability of sex partnering as good, healthy and abundant. Statements that sex is healthy, good or able to be engaged in abundantly are personal judgments about sexual partnering that are not evaluative in nature, but rather formed from personal experiences about the acceptability of a behavior based on what others think. This indicates that these statements are all normative beliefs.

Another judgment obtained from the interviews for this study is the statements about having numerous sex partners being a behavior that is either demeaning or fun. The belief is either stated or unstated that numerous sex partners are wrong, and engaging in multiple sex partners is then looked down upon by society. This is an important belief related to sexual partnering, but a decision was made not to include a question about whether a respondent thinks multiple sex partners is wrong or right because this question could be perceived as a negative judgment about gay men and could reflect negatively on the survey as a whole. In order to obtain data related to this kind of subjective norm, a question about whether god approves of sexual partnering with another male was included in the survey. This is a belief statement that indicates an overall moral judgment by society about male sex partnering and therefore could be attributed to a direct measure of a subjective norm.

The two intentions for this study, to either partner monogamously or to engage in an open sexual partnership, were chosen because of their clear applicability to sexual partnering and the attitudes and beliefs that accompany the intentions mentioned here.

The survey developed for this study is by its inherent nature sensitive and thought provoking. Therefore, the intention was to create a survey that did not burden the respondent with a many questions taking a long time to complete. A time parameter of fifteen or twenty minutes was established in order to complete the survey. A draft of the survey developed from the perspective just presented here as well as the information from the qualitative phase was presented to members of the Center for Research on Health and Sexual Orientation, at the University of Pittsburgh's Graduate School of Public Health. Feedback and comments were incorporated into a new revision of the survey. That revision was then piloted with eight participants recruited for this purpose who were paid \$40.00 each for their participation.

The survey pilot group was diverse, ranging in age from 19 to 39, and a mix of African American and Caucasian males. This group met in a private location at the University of Pittsburgh Graduate School of Public Health for the purpose of completing the pilot survey. Participants were instructed to complete the survey and share their comments and impressions with the PI as a group. These comments and feedback were incorporated into the survey design and final revision.

In the development of the survey the use of language was highly important. Informal conversations with LGBT researchers and MSM in the community helped to determine the best use of words connected to partner acquisition for questions on MABI. There was some difficulty determining the proper language for a "friend with benefits" and a "fuck buddy." This is more than likely due to the fact that a typology of sex partners has not existed prior to this study, and these kinds of partnerships are often clandestine or not openly discussed.

Originally, the survey asked only about anonymous and casual partners, but some men had difficulty answering this question because from their perspective there are distinctions between

anonymous and casual partners, regular sex partners as well as sex partners who are friends. Discussion of the type of language to use allowed for a deeper exploration of the types of sex partners than had been initially planned. A typology developed wherein “friends with benefits” appeared to be the common term for those friends who are either acquaintances or long-term friends and who also at times engage in sexual behavior with that friend. A clear distinction became apparent between a “friend with benefits” and a “fuck buddy.”

The term “fuck buddy” can have a derogatory connotation to some MSM. Yet in conversations about the best term for this type of sexual encounter, there was not a better term to describe this arrangement. In this case, the fuck buddy is the person who tends to NOT be a friend, meaning there is no other relationship with this person aside from regular sexual contact. Using different types of fetishes and kinky sexual behavior are frequently the reason for having a “fuck buddy.” This kind of relationship may result from a need to pursue a sexual fantasy or sexual appetite that a committed partner or boyfriend may not be willing or able to satisfy. The fuck buddy may be a clandestine sexual encounter due to stigma or shame connected with same sex sexual behavior, or he may be someone familiar who has agreed upon regular sexual encounters because a fear of commitment or lack of desire to have a traditional long term sexually and emotionally exclusive relationship. This kind of sexual partnership may be a way for some men to practice “safer” sex or experience some sense of having a trusted sexual partner. In other words, the fuck buddy is believed to be trustworthy in reporting to be STI free. The fuck buddy can also be the person who relieves a sexual desire without “strings” attached. The “strings” might be a commitment to spend time or energy with another person for the sake of developing a home, partnership or social network. This would be typical of a person who has



commitments of time and energy related to work or other social obligations and is unable to sustain a more formal committed relationship with another man.

There was considerable discussion with other researchers and informal conversations with MSM regarding the language used for the original draft survey questions on MABI. Some considered questions about sex being motivated by a fear of rejection to be confusing. Ongoing discussion about this question led to an agreement that fear of rejection is certainly a motivation involved in sexual partnering. Many men informally admitted to a fear of rejection when approaching another man for the purpose of sexual partnering. How this may affect sexual partnering can be related to a situation wherein some men agree to sexual behavior or experiences that they would normally not have engaged in out of a fear of rejection by the sex partner they are pursuing.

Before the survey was administered to the sample of MSM, a reliability analysis was performed using the questions related to MABI using SPSS v17 and the test for a Cronbach's alpha. The result of this test was a Cronbach's alpha of .634. This was a high enough reliability factor to go forward with this survey. A full copy of the survey is provided in Appendix C.

### **3.1.b. Recruitment Procedure**

Various methods were employed to recruit participants to complete the survey. Participant recruiters were selected and trained by the principal investigator according to their social standing within the gay community. This included one recruiter who works extensively with STI prevention with young MSM and is also employed by a popular local gay venue offering weekly entertainment for young gay, lesbian, and queer youth (ages 18-21). A second recruiter manages a popular video lounge catering to gay, lesbian, queer and straight clientele of all ages. A third recruiter is the prevention specialist for the Pittsburgh Aids Task Force (PATF) with a long-

standing relationship with many MSM through prevention education and testing efforts. He was able to engage many MSM who do not patronize bars.

Recruiters were supplied with business cards displaying contact information for the principal investigator (PI); potential participants were informed of the study and asked to contact the PI to obtain and complete a survey. The PI obtained permission from the bar owners where recruiters were employed to engage in recruitment of men for this study. With the assistance of the bar owner and recruiter, days and times were agreed upon for a table to be set up at the bar where the recruiter could direct potential participants to complete a survey. The recruiter from the Pittsburgh AIDS Task Force (PATF) was provided with blank surveys, cards with the PI contact information as well as the incentives to be given to participants who complete the survey. When the recruiter approached a perspective participant he would assess the participant's eligibility for the study, and when eligibility was established the recruiter obtained verbal consent of the person recruited to participate in the study. A completed the survey was then given to the participant and upon return to the recruiter the incentive was given. Surveys were returned to the PI when they were all completed. For the purpose of maintaining integrity and quality control, this recruiter was enlisted for this task because he is a trusted professional and there was no question that these surveys would be completed by individual anonymous respondents meeting the agreed upon eligibility.

Participants were also recruited by a letter mailed to participants in a larger study, the Pitt Men's Study (PMS) of the University of Pittsburgh. Potential participants from the PMS were informed about the study in the letter and requested to contact the PI to set up a place and time to take the survey or to provide an address so the survey could be emailed to the participant after the PI had determined eligibility for the study. The participant was asked to complete the survey

and email or mail it back to the PI in a self-addressed stamped envelope provided. In either case, a return address was requested to receive the incentive.

Flyers were placed in the Gay and Lesbian Community Center of Pittsburgh (GLCC). The GLCC also agreed to send out two separate emails to its membership distribution list informing members about the nature and content of the study, as well as providing contact information to participate in the study. Surveys were conducted in the same manner as for those participants recruited through the Pitt Men's Study. Flyers were also placed at Persad Center, Inc (a gay and lesbian counseling center located in Pittsburgh, PA). Potential participants were instructed to contact the front office staff at Persad for a copy of the survey; the completed survey was returned to the front office and a cash incentive was paid at that time.

Recruitment was also accomplished through agreements with two GLBT sports organizations, the Steel City Bowling League and the Steel City Volleyball League. The PI met with the Board of Directors of each organization, explained the purpose of the study and its voluntary and anonymous nature, as well as the procedure for participation in and compensation for the study. Both organizations agreed that recruitment could take place at a sporting event with an announcement at the beginning of the event about the opportunity to participate in the study and the location to complete a survey. The PI complied with the request of both Boards to recruit in the manner just described and obtained a significant number of completed surveys at each sporting event.

Recruitment was also accomplished through two University LGBT alliance groups, Carnegie Mellon University Allies and the University of Pittsburgh Rainbow Alliance. The PI contacted the faculty liaison for each group and informed this person of the purpose and nature of the study. The faculty liaison then apprised the group's student Steering Committee of the study, and

the PI met with each organization's Steering Committee. A recruitment strategy was worked out by the committees and the PI, in which each agreed to protect the anonymity of its membership. The decision was that each organization would send an email notice, prepared by the PI, to its membership informing them about the study and requesting that they contact the PI by email or phone and set up an appointment to complete the survey or request that survey be sent via email or regular mail. This procedure was similar to the one used for the PMS and GLCC.

### **3.1.c. Data Collection**

Each survey was self-administered. After initial screening to determine if the participant was eligible for the study, a paper survey was presented to the respondent. The respondent completed the survey in the presence of the PI or recruiter except for thirty-two surveys completed remotely via email (GLCC, Pitt Men's Study letter, Rainbow Alliance email notices). In all cases no identifying information of the survey respondent was recorded. Before each survey was presented to the respondent it was labeled with an ID number comprised of location, date of completion and number of surveys completed at that location (e.g. 100109(date)-20(number of the survey)-10(location)). Surveys returned by email were dated according to the date it was received by the PI. This system allowed for tracking of survey by location and number at each location, in the event that comparisons of responses were needed. When a respondent returned a completed survey to the PI or recruiter he was compensated with \$15.00 cash. Participants were not asked to sign a receipt of funds form because of the anonymous nature of this survey as well as how incentives were paid through the standard mail system. Completed survey data were entered into SPSS v17.0 by the PI. Surveys have been saved for data quality assurance and all data were checked through a report of the frequencies of data.

### **3.1.d. Participants**

One hundred fifty three MSM were recruited and completed the study survey. Two men reported their age on the survey to be over the range for this sample and were eliminated. The criteria for participation were being a self-identified MSM between 18 and 39 years of age, residing or having recently resided in the greater Pittsburgh area, comprising the 10 county area around the city of Pittsburgh and a native English speaker.

## **4. RESULTS**

Demographic characteristics are presented for 18 to 28 year olds and 29 to 39 year olds (see Table 8). The survey sample was divided in half by age for the purpose of comparison by age groups. Tables 9 and 10 of this section provide an overview of survey location and race/ethnicity by age group. The purpose of the latter two tables is to detail the background of those answering the survey in terms of race/ethnicity and the type of location where they answered the survey. The purpose of stratifying survey responses by location is to demonstrate which venues presented the highest response rate, and whether there were any differences in response rate by age group. As was expected for Southwestern Pennsylvania, the majority of participants in both age groups were Caucasian. It was expected that the majority of participants in the 18 to 28 year old group would be recruited from Pegasus Lounge, because it is a venue catering three nights a week to patrons under 21 years of age, and this was the result.

**Table 8 – Demographics of the Participants**

	AGE		AGE		$\chi^2$
	18-28		29-39		
	n	%	n	%	
<b>Race/Ethnicity</b>	N=83		N=65		5.413
Caucasian	69	83.1	52	80	
African American	9	10.8	6	9.2	
Latino	1	1.2	2	3.1	
Latino-Non Black	1	1.2	0	0	
Asian	0	0	2	3.1	
Indian	0	0	1	1.5	
Mixed	3	3.6	2	3.1	
<b>Education</b>	N=85		N=65		12.26*
High School	15	17.6	8	12.3	
Associate Degree	4	4.7	1	1.5	
College	53	62.4	32	49.2	
Graduate School	8	9.4	19	29.2	
Post Graduate	0	0	1	1.5	
Technical	5	5.9	4	6.2	
<b>Monthly Income</b>	N=85		N=66		30.48**
0	0	23.5	3	4.5	
\$1,000-\$999.99	9	10.6	3	4.5	
\$1,000.00-\$1,999.99	22	25.9	7	10.6	
\$2,000.00-2,999.99	15	17.6	13	19.7	
\$3,000.00-3,999.99	10	11.84	14	21.2	
>\$4,000.00	9	10.6	36	39.4	

**Table 9 – Demographics of Age Group 18—28, Survey Location and Race/Ethnicity**

Locations	Caucasian	African American	Asian	Latino	Mixed
5801	13	0	0	1	1
Pegasus	23	6	0	0	1
Persad	1	0	0	0	0
GLCC E-Blast	1	0	0	0	0
PMS	1	0	0	0	0
Steel City Volleyball	9	1	0	1	0
Pitt Rainbow Alliance	7	0	0	0	1
Steel City Bowling	8	0	0	0	0
PATF	5	2	0	0	0
Total	77	9	0	2	3

**Table 10 – Demographics of 28-39 Age Group, Survey Location and Race/Ethnicity**

Locations	Caucasian	African American	Asian	Latino	Indian	Mixed
5801	2	0	1	0	0	0
Pegasus	1	0	0	0	0	0
Persad	0	2	0	0	0	1
GLCC E-Blast	4	1	1	0	1	1
PMS	11	1	0	0	0	0
Steel City Volleyball	6	0	0	1	0	0
Pitt Rainbow Alliance	1	0	0	0	0	0
Steel City Bowling	11	0	0	1	0	0
PATF	16	2	0	0	0	0
Total	52	6	2	2	1	2

Two interesting demographic critical to this study are the number and type of sex partner. Data were collected on various types of sex partners and how many each respondent reported over a twelve-month period and a lifetime. These data are described below in Table 11, which provides evidence of the mean numbers of sex partners of these men and the various kinds of sex partners they reported. Table 12 below provides a description of the locations of surveys and the number of participants from each location. Results of the analysis of data are reported here according to the specific aims cited in the introduction. The set of hypotheses for the second specific aim of this study are included for each section of analysis.

**Table 11 – Mean & Median Number of Sex Partners by Type**

Type of Partner	Mean (total number)	Median	Minimum	Maximum
Committed Partners in 12 Months	1.67 (150)	1	0	19
Committed Partners in his Lifetime	4.56 (151)	4	0	21
Friends with Benefits 12 Months	1.65 (150)	1	0	10
Friends with Benefits Lifetime	6.36 (148)	3	0	176
Fuck Buddies 12 Months	1.65 (125)	0	0	25
Fuck Buddies Lifetime	6.53 (124)	2	0	176
Anonymous Tricks 12 Months	4.38 (146)	1	0	70
Anonymous Tricks Lifetime	84.69 (147)	5	0	7200
Casual Tricks 12 Months	3.75 (147)	1	0	75
Casual Tricks Lifetime	26.55 (147)	5	0	1200



**Table 12 – Number of Completed Surveys by Location**

Locations	Number (%)
5801	20 (13%)
Pegasus	32 (21)
Persad	4 (3%)
GLCC E-mail distribution	9 (6%)
PMS	13 (9%)
Steel City Volleyball	19 (12%)
Pitt Rainbow Alliance	9 (6%)
Steel City Bowling	21 (14%)
PATF	25 (16%)
CMU Allies	0 (0%)
Total	152

#### **4.1. Results for Specific Aim 2 – H<sub>1</sub>**

The first hypothesis stated under Specific Aim 2 is a comparison of MSM 29 to 39 years of age with MSM 18 to 28 years of age, the older group will score higher on the following measures of motivation for sex: Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, Need for romance and Need for Intimacy.

It was also hypothesized that the older group would endorse the following attitudes toward sex to a greater degree than the younger group: Sex is for companionship, Sex should be accompanied by emotional trust and, Sex should be accompanied by physical trust. The older group would score higher on the desire to please my sex partner. It was also hypothesized that the older group would endorse the following beliefs regarding sex partnering to a greater degree than the younger group: I should have all the sex I want, Internet sex is easier, God approves of male on male sex, Sex is only for a committed relationship and Sex is good. Finally, there were

expected differences by age in the intentions to have an open or monogamous relationship. The analysis to test this hypothesis was performed through comparison by age group of the means of responses to questions related to the MABI of the men sampled. This resulted in no differences in mean responses between age groups (refer to Table 13). The null hypothesis was supported.

Table 13 – Comparison of Mean Responses of MABI and Age

Sex partner acquisition related to:	AGE 18-28			AGE 29-39		
	n	Mean	SD	n	Mean	SD
<b>Motivations</b>						
Excitement	85	3.89	.802	66	3.94	.742
Horniness	83	3.81	.862	65	4.03	.790
Fear of Rejection	78	2.36	.720	65	2.32	.664
Loneliness*	78	2.73	.658	64	2.97	.755
Boredom	82	2.67	.704	66	2.55	.587
Stress	79	3.10	.856	65	2.91	.765
Anxiety	79	2.76	.851	65	2.75	.830
Need for Intimacy	83	3.66	.901	66	3.82	.875
Need for Romance	82	3.70	.856	65	3.52	.793
<b>Attitude</b>						
Need for Companionship*	84	3.76	.859	64	3.50	.735
Need for Emotional Trust	82	4.00	.861	66	3.89	.862
Need for Physical Trust	83	4.29	.758	66	4.18	.763
Fear of HIV	82	3.98	.981	66	4.06	.875
Testing a Relationship	75	3.08	.955	62	2.89	.851
High General Self Esteem	83	3.81	.803	66	3.62	.780
Desire to Please Partner*	84	4.19	.719	66	3.91	.696
Religious	85	3.16	1.262	66	3.18	1.036
Spiritual	85	3.95	1.045	68	3.83	1.117
<b>Belief</b>						
God Approves	84	3.51	1.632	66	3.48	1.501
Sex is Good	85	4.33	.851	66	4.23	.675
Internet Sex is Easier	85	3.36	1.271	66	3.36	1.320
Have All The Sex I Want	85	3.93	1.142	66	3.38	1.117
Sex is Healthy	85	4.42	.792	65	4.45	.638
Sex for Commitment	85	3.15	1.064	66	2.95	.812
<b>Intentions</b>						
Monogamous	84	4.33	.974	64	4.41	.886
Open Relationship <sup>a</sup>	75	2.56	.793	62	2.32	.647

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

#### 4.2. Results for Specific Aim 2 – H<sub>2</sub>

The second hypothesis stated under Specific Aim 2 reports to compares the responses to the questions related to MABI about the number of twelve-month and lifetime sex partners, the respondents reporting higher numbers of sexual partners (>4 in the last year and >10 partners in

a lifetime respectively) would score higher on the following measures of motivation for sex: Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, Need for Romance and Need for Intimacy. Those with higher numbers of sex partners were hypothesized to endorse the following attitudes toward sex to a greater degree than those with lower numbers of sex partners: Sex is for companionship, Sex should be accompanied by emotional trust and Sex should be accompanied by physical trust. It was also expected that those with higher numbers of sex partners would score higher in terms of desire to please my sex partner. Those with higher numbers of sex partners would score higher than those with lower numbers of sex partners on: the beliefs that I should have all the sex I want, Internet sex is easier, Sex is good, and god approves of male on male sex. Those with lower numbers of sex partners would score higher than those with higher numbers of sex partners on: the belief that Sex is only for a committed relationship. Finally, it is expected that those with higher numbers of sex partners would report the intention to have an open relationship more frequently than those with lower numbers of sex partners. The reverse would be true for the intention to be monogamous. The test for this hypothesis was accomplished by a correlation of responses of the questions related to MABI with lifetime and twelve-month numbers of sex partners. Results of this analysis are described below in Table 14.

Table 14 - Correlation of the Number of Sex Partners in 12 Months and a Lifetime and MABI

Sex partner acquisition related to:	Number of Sex Partners in 12 months		Number of Lifetime Sex Partners	
	n	r	n	r
<b>Motivations</b>				
Excitement	150	.183	146	.154
Horniness	148	.060	144	.123
Fear of Rejection	143	.038	139	-.051
Loneliness	141	.190*	137	-.055
Boredom	147	.291**	143	.118
Stress	143	.163*	133	.202*
Anxiety	143	.121	144	-.049
Need for Intimacy	148	-.021	144	.131
Need for Romance	146	-.185*	143	.100
<b>Attitude</b>				
Need for Companionship	147	-.244*	144	.063
Need for Emotional Trust	147	-.355**	143	.087
Need for Physical Trust	148	-.224**	144	.059
Fear of HIV	147	-.229**	143	.068
Testing a Relationship	135	-.252**	132	-.148
High General Self Esteem	148	-.043	144	.133
Desire to Please Partner	148	-.156 <sup>a</sup>	145	.011
Religious	150	-.199*	146	-.057
Spiritual	150	-.185*	146	-.111
<b>Belief</b>				
God Approves	149	.012	145	-.167*
Sex is Good	150	.025	146	.097
Internet Sex is Easier	150	.246**	146	.040
Have All The Sex I Want	150	.160*	146	.116
Sex is Healthy	149	.127	145	.087
Sex for Commitment	150	.332**	146	-.061
<b>Intentions</b>				
Monogamous	147	-.202*	143	-.208*
Open Relationship*	136	.239**	133	.202*

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

The correlation is not high for the numbers of sex partners in twelve months and the MABI variables. The MABI variables Boredom, Emotional and Physical trust, Fear of HIV, Testing a relationship, Internet sex is easier, and the Intention for an open relationship are significant at the  $p < .01$  level. The MABI variables Loneliness, Need for companionship, Religious, Spiritual, I can have all the sex I want and the Intention to be monogamous, are significant at the  $p < .05$  level.

The correlation is not high for the numbers of sex partners for a lifetime and the MABI variables. The MABI variables Sex motivated by stress and the Intention to be monogamous were significant at the  $p < .01$  level, and the belief that God approves of male-male sex was significant at the  $p < .01$  level in the negative direction. In a comparison of the correlations between twelve month and lifetime number of sex partners and MABI variables, many differences occur, except for sex partner acquisition motivated by a need to relieve stress.

#### **4.3. Results for Specific Aim 2 – H<sub>3</sub>**

The third hypothesis states for Specific Aim 2 that controlling for age, the intention to be monogamous or to have an open relationship will be predicted by the motivations, attitudes and beliefs recorded by survey respondents. This hypothesis is meant to test the assumptions of the Theory of Planned Behavior that attitudes, beliefs and motivations will predict the intention to perform a behavior. The test for this hypothesis began with a series of correlations. The sample was divided into two age groups and the MABI variables were correlated with the two variables of monogamy and the intention for an open relationship. These data are presented below in Tables 15 and 16.

Table 15-Correlations of MABI with INTENTIONS for Age Group 18-28

Sex partner acquisition related to	Intention to be Monogamous		Intention to have An Open Relationship	
	n	r	n	r
<b>Motivations</b>				
Excitement	84	-.082	75	.087
Horniness	83	-.171	74	.209
A Fear of Rejection	77	.072	70	.142
Loneliness	77	.102	71	.171
Boredom	81	-.050	74	.227 <sup>a</sup>
Stress	78	.028	71	.250**
Anxiety	78	-.097	71	.311**
A Need for Intimacy	82	.075	74	-.035
A Need for Romance	81	.151	72	-.042
<b>Attitude</b>				
Need for Companionship	84	.067	74	-.129
Neef for Emotional Trust	81	.204	73	-.191
Need for Physical Trust	82	.061	73	-.172
A Fear of HIV	81	.076	73	-.107
Testing a Relationship	74	.100	66	-.032
High General Self Esteem	82	-.018	73	-.175
Desire to Please Partner	83	.136	74	.034
Religious	84	-.104	75	.185
Spiritual	84	.145	75	-.113
<b>Belief</b>				
God Approves	83	-.076	74	.087
Sex is Good	84	-.010	75	.135
Internet Sex is Easier	84	-.016	75	.021
Have All The Sex I Want	84	-.054	75	.146
Sex is Healthy	84	.011	75	.035
Sex for Commitment	84	.093	75	.005

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

**Table 16-Correlations of MABI with INTENTIONS for the Age Group 29-39**

Sex partner acquisition related to:	Intention to be Monogamous		Intention to have An Open Relationship	
	n	r	n	r
<b>Motivations</b>				
Excitement	64	.073	62	.021
Horniness	63	-.060	61	.196
A Fear of Rejection	63	-.225 <sup>A</sup>	61	.130
Loneliness	62	.134	60	.138
Boredom	64	.006	62	.269*
Stress	63	-.182	61	.227
Anxiety	63	-.196	61	.368**
A Need for Intimacy	64	.273*	62	-.041
A Need for Romance	63	.065	61	-.206
<b>Attitude</b>				
Need for Companionship	62	-.113	60	-.094
Neef for Emotional Trust	64	.247*	62	-.248
Need for Physical Trust	64	.324**	62	-.243
A Fear of HIV	64	.197	62	-.067
Testing a Relationship	60	.112	58	-.235
High General Self Esteem	64	.199	62	-.030
Desire to Please Partner	64	.203	62	.072
Religious	64	.098	62	.022
Spiritual	64	.344*	62	-.085
<b>Belief</b>				
God Approves	64	-.269*	62	.042
Sex is Good	64	.088	62	.337**
Internet Sex is Easier	64	-.212	62	.107
Have All The Sex I Want	64	-.204	62	.126
Sex is Healthy	63	.077	61	-.070
Sex for Commitment	64	.026	62	-.170

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance



The correlation coefficients for the two age groups, intentions and MABI were not strong, although the correlation coefficients in the 29 to 39 year old group were slightly higher.

The significant correlations for the 18 to 28 year old group are stress and anxiety which are significant at the  $p < .01$  level with the intention to have an open relationship, while boredom is marginally significant with the intention to have an open relationship near the  $p < .05$  level. In the 29-39 year old group sex motivated by anxiety and the relationship of the belief that sex is good with the intention to have an open relationship are significant at the  $p < .01$  level. Sex motivated out of boredom is significant at the  $p < .05$  level with the intention to have an open relationship. The attitude that the need for physical trust is significant at the  $p < .01$  level with the intention to be monogamous. The variables emotional trust should accompany sex, spiritual, a need for intimacy and god approves of male on male sex are significant at the  $p < .05$  level with the intention to be monogamous.

#### **4.4. Results for Specific Aim 2 – H<sub>4</sub>**

The purpose of Specific Aim 3 is to test the data for linkages of MABI to lifetime number of STIs. The hypothesis is that a comparison of MSM who report one or more STI in their lifetime against those who report no STI in their lifetime will show that the MSM with one or more STI score higher on these measures of motivations for sex: Excitement, “Horniness,” Loneliness, Boredom, Stress, Anxiety, Romance, and Intimacy. The group reporting one or more STI in a lifetime is hypothesized to endorse the following attitudes toward sex to a greater degree than the group with no reported STI: Companionship, Emotional trust, Physical trust and the Desire to please a sex partner. The group reporting one or more STI group compared with the group reporting no STI should also differ on a variety of beliefs regarding sex, such as I should have all the sex I want, Internet sex is easier, God approves of male on male sex, Sex is only for a

committed relationship, and Sex is good. Differences in the number of STIs should also be related to the intentions to have an open or monogamous relationship. Testing these hypotheses using logistic regression produced two significant results. Sex partnering motivated by a need for excitement and/or loneliness significantly predicted a higher rate of STIs in a lifetime while the attitude of partnering for sex because of a need for companionship significantly predicted a lower rate of STIs (refer to Table 17).

**Table 17-Logistic Regression of MABI Against Number of Lifetime STI**

<b>Dependent Variables</b>	<b>Number of STI (0 and &gt;1)</b>	
<b>Independent Variables</b>	<b>OR</b>	<b>(95% CI)</b>
<b>Motivations</b>		
<b>Excitement</b>	1.58*	(.994-2.53)
<b>Horniness</b>	1.14	(.743-1.75)
<b>A Fear of Rejection</b>	.932	(.544-1.60)
<b>Loneliness</b>	1.73*	(1.03-2.88)
<b>Boredom</b>	1.63	(.948-2.79)
<b>Stress</b>	1.20	(.779-1.85)
<b>Anxiety</b>	1.47	(.963-2.25)
<b>A Need for Intimacy</b>	.928	(.624-1.38)
<b>A Need for Romance</b>	.682	(.441-1.05)
<b>Attitude</b>		
<b>Need for Companionship</b>	.621*	(.392-985)
<b>Neef for Emotional Trust</b>	.724	(.477-1.09)
<b>Need for Physical Trust</b>	.817	(.514-1.29)
<b>A Fear of HIV</b>	.802	(.549-1.17)
<b>Testing a Relationship</b>	.696	(.447-1.08)
<b>High General Self Esteem</b>	1.14	(.726-1.78)
<b>Desire to Please Partner</b>	1.08	(.656-1.77)
<b>Religious</b>	.922	(.680-1.25)
<b>Spiritual</b>	.933	(.673-1.29)
<b>Belief</b>		
<b>God Approves</b>	.928	(.743-1.16)
<b>Sex is Good</b>	.791	(.507-1.24)
<b>Internet Sex is Easier</b>	1.13	(.855-1.49)
<b>Have All The Sex I Want</b>	1.39	(.981-1.96)
<b>Sex is Healthy</b>	.865	(.534-1.40)
<b>Sex for Commitment</b>	.786	(.542-1.14)
<b>Intentions</b>		
<b>Monogamous</b>	1.18	(.795-1.77)
<b>Open Relationship<sup>a</sup></b>	1.19	(.745-1.93)

\* $p < .05$ , \*\* $p < .01$

Since correlations between the responses to questions of MABI and numbers of sex partners were not high (refer to Table 14), a decision was made to conduct a factor analysis of the MABI variables. This analysis produced a matrix of nine variables (refer to Table 18).

**Table 18-Factor Analysis for MABI**

<b>Factor Analysis for MABI</b>									
	1	2	3	4	5	6	7	8	9
Sex is Healthy –Belief	.790								
Overall Sex is Good –Belief	.739								
Should All the Sex Want -Belief	.547								
Sex because of Anxiety –Motivation		.733							
Have an Open Relationship –Intention		.730							
Sex because of Stress –Motivation		.663							
Internet Sex is Easier-Belief		.348							
Need for Intimacy-Motivation			.771						
Need for romance-Motivation			.766						
Physical Trust and Sex –Attitude				.701					
Emotional Trust and Sex-Attitude				.634					
Fear of HIV-Attitude				.609					
Self Esteem Generally High –Attitude				.546					
Sex for Companionship –Attitude					-.717				
Loneliness – Motivation					.538				
Boredom – Motivation					.534				
Are you religious –Attitude						.840			
Are you Spiritual –Attitude						.800			
Desire to Please a Sex Partner-Attitude							.656		
To be Monogamous –Intention							.498		
Sex is only for Committed Relationship –Belief							.424		
Sex for Excitement-Motivation								.715	
Sex because Horny								.649	
Choice of Sex because of testing a relationship								.471	
Believe God Approves of Male Sex									.744
Fear of Rejection									.595
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.									
a. Rotation converged in 15 iterations.									

A set of dummy variables was created from the above matrix, eliminating the two variables of intention. These variables were eliminated because the set of dummy variables would be regressed against intentions. The resulting computed variables are; (1) *Healthy and Good*; (2) *Stress and Anxiety*; (3) *Romance and Intimacy*; (4) *Trust*; (5) *Lonely and Bored*; (6) *Religious and Spiritual*; (7) *Desire to Please*; (8) *Excitement*; (9) *God Approves*. These variables were regressed by age group with the variables numbers of sex partners, lifetime STI and intentions. There were no significant results for the 18 to 28 year old group (refer to Table 19). For the 29 to 39 year old group, there were three significant results but these were difficult to interpret (refer to Table 20). The variable Religious and Spiritual is indicated as a significant predictor at the  $p < .05$  level of one or more STI's in a lifetime and the same variable showed marginal significance as a predictor of the intention to have an open relationship. The variable God Approves is indicated as a significant predictor at the  $p < .05$  level of the intention to have an open relationship.

**Table 19 – Logistic Regression Analysis on Age, Factored Variables, 12 Month Sex Partners, Lifetime STI and Intentions for the 18-28 Age Group**

Dependent Variables	# Male Sex Partners in 12 Months		Lifetime Number of STI's		Intention to be Monogamous		Intention to have an Open Relationship	
	OR	(95% CI)	OR	95% CI	OR	95% CI	OR	95% CI
<b>Independent Variables</b>								
<b>Healthy and Good</b>	1.23	(.98 – 1.55)	.91	(.71 – 1.18)	1.16	(.84 – 1.62)	.95	(.67 – 1.35)
<b>Anxiety and Stress</b>	1.05	(.82 - 1.32)	1.27	(.97 - 1.67)	1.02	(.71 – 1.48)	.89	(.61 – 1.29)
<b>Romance and Intimacy</b>	1.09	(.90 – 1.48)	.70	(.47 – 1.04)	.73	(.45 – 1.17)	.96	(.57 – 1.61)
<b>Trust</b>	.99	(.81 – 1.21)	1.04	(.81 – 1.33)	.90	(.60 – 1.19)	1.12	(.81 – 1.54)
<b>Lonely and Bored</b>	1.01	(.69 – 1.50)	1.15	(.67 – 1.98)	1.28	(.73 – 2.24)	1.42	(.67 – 3.01)
<b>Religious and Spiritual</b>	1.23	(.95 – 1.58)	1.32	(.96 – 1.83)	.89	(.63 – 1.25)	.85	(.56 – 1.29)
<b>Desire to Please</b>	1.11	(.85 – 1.45)	1.16	(.83 – 1.63)	1.07	(.73 – 1.57)	.77	(.49 – 1.21)
<b>Excitement</b>	1.28	(.94 – 1.74)	.78	(.52 – 1.18)	1.16	(.77 – 1.75)	.71	(.42 – 1.20)
<b>God Approves</b>	1.14	(.88 – 1.48)	.89	(.67 – 1.21)	1.03	(.73 – 1.46)	.83	(.53 – 1.30)

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

**Table 20 – Logistic Regression Analysis on Age, Factored Variables, 12 Month Sex Partners, Lifetime STI and Intentions for the 29-39 Age Group**

Dependent Variables	# Male Sex Partners in 12 Months		Lifetime Number of STI's		Intention to be Monogamous		Intention to have an Open Relationship	
	OR	(95% CI)	OR	95% CI	OR	95% CI	OR	95% CI
<b>Healthy and Good</b>	1.19	(.94 – 1.51)	1.15	(.90 – 1.47)	1	(.74-1.36)	.79	(.43 – 1.46)
<b>Anxiety and Stress</b>	1.01	.80 – 1.28)	1.07	(.84 – 1.37)	1.18	(.87 – 1.61)	.85	(.54 – 1.33)
<b>Romance and Intimacy</b>	.85	(.61 – 1.20)	.83	(.59 – 1.17)	.91	(.57 – 1.43)	3.09	(.91 – 10.46)
<b>Trust</b>	.89	(.72 – 1.12)	.92	(.74 – 1.15)	.92	(.72 – 1.21)	1.46	(.96 – 2.21)
<b>Lonely and Bored</b>	.88	(.58 – 1.32)	1.07	(.72 – 1.61)	1.09	(.65 – 1.81)	1.05	(.46 – 2.40)
<b>Religious and Spiritual</b>	.96	(.73 – 1.25)	1.35*	(1.01 – 1.81)	.75	(.51 – 1.10)	1.17 <sup>a</sup>	(.67 – 2.10)
<b>Desire to Please</b>	1.03	(.75 – 1.40)	.86	(.64 – 1.17)	1.23	(.81 – 1.86)	1.02	(.56 – 1.84)
<b>Excitement</b>	1.10	(.80 – 1.50)	.83	(.60 – 1.15)	.96	(.63 – 1.47)	1.73	(.84 – 3.59)
<b>God Approves</b>	1.01	(.80 – 1.42)	1.18	(.87 – 1.60)	.87	(.60 – 1.25)	2.21*	(1.10 – 4.43)

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

Once again, the results above may be due to a lack of sample power. In order to examine this question two Venn diagrams were developed to visually demonstrate the number of cases related to each variable (refer to Figures 4 & 5).

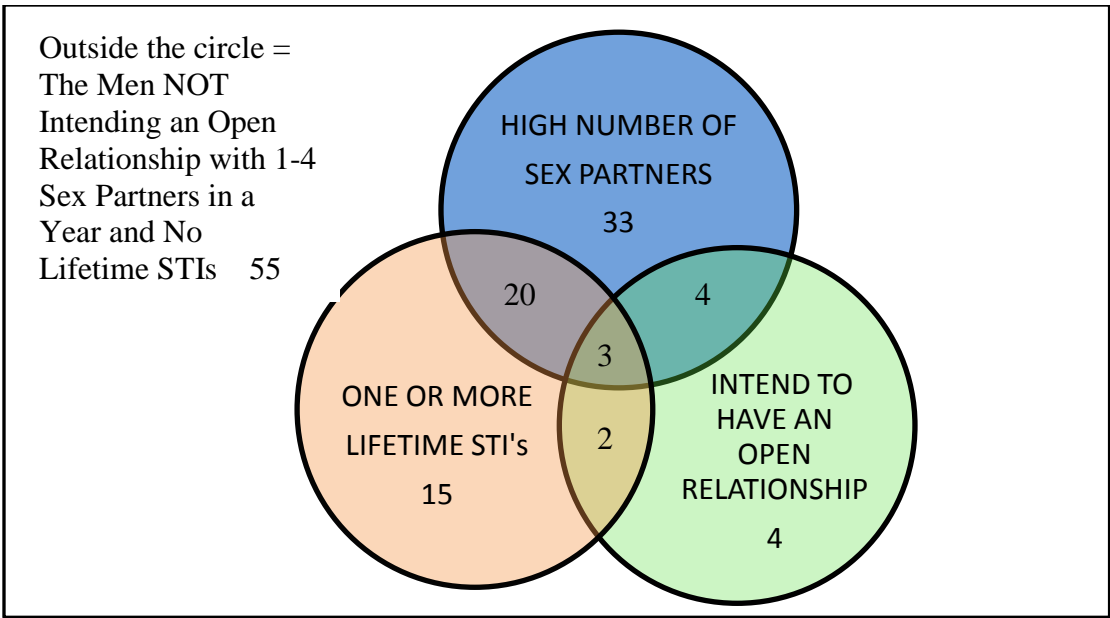


Figure 4 – Venn Diagram – Intention to Have an Open Relationship, Number of 12 Month Sex Partners and Lifetime STIs (N=146)

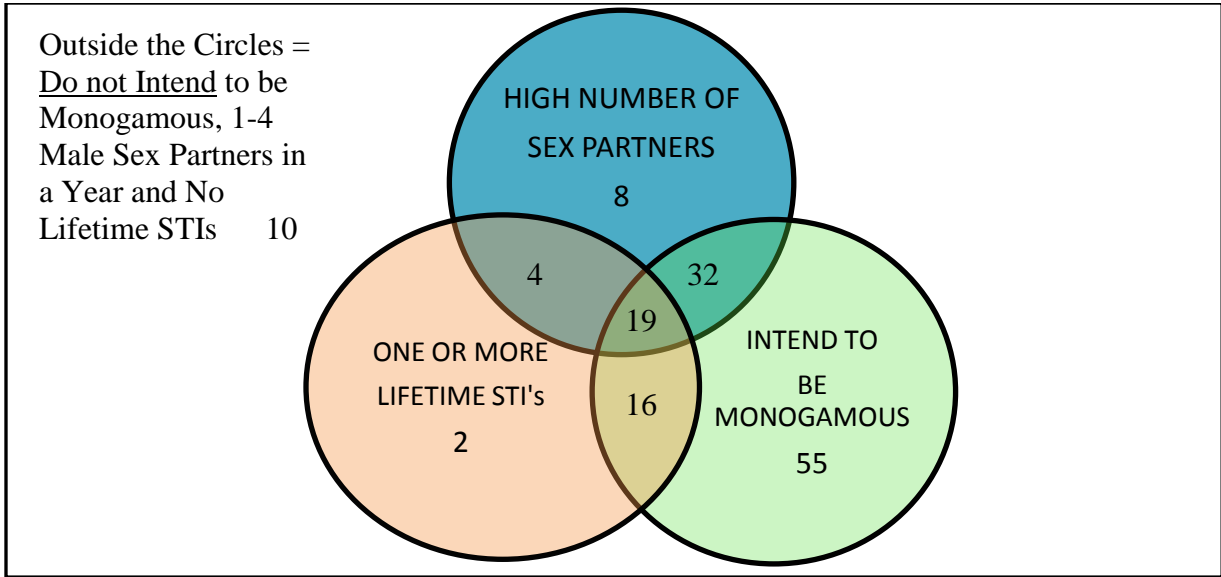


Figure 5 – Venn Diagram – Intention to be Monogamous, Number of 12 Month Sex Partners and Lifetime STIs (N=146)

These diagrams reveal that a small number of cases comprise the category which includes number of sex partners, STI and Intentions. These small numbers confirm the suspicion that the



results of the previous logistic regression analyses and correlation analyses are affected due to sample power. This made it necessary to conduct regression analysis with a re-computed variable. This computed variable is a combination of cases with one or two sex partners in twelve months, no STIs and never having the intention to have an open relationship. This re-computed variable was then regressed against the factored variables with results displayed in Table 21.

**Table 21 - Logistic Regression of the Nine Factored Variables Against the Computed Variable**

Dependent Variables	NOHIGHSPSTI	
Independent Variables	OR	(95% CI)
Healthy and Good	.99	(.84 – 1.17)
Romance and Intimacy	1.25	(.99 - 1.58)
Trust	1.29**	(1.09 – 1.53)
Lonely and Bored	.80	(.59 – 1.08)
Religious and Spiritual	1.01	(.84 -1.21)
Excitement	.96	(.76 – 1.20)
God Approves	.93	(.76 – 1.13)
Anxiety and Stress	.80*	(.67 - .97)
Desire to Please	1.73**	(1.26 – 1.4)

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

This analysis resulted in three significant predictor variables for no high sex partners and no STI's in a lifetime. These are Trust, Desire to Please and Anxiety/Stress, from the nine variables to come out of the factor analysis. To further test these results, they were regressed with the same independent variable (NOHIGHSPSTI) with covariates of age and monthly income (refer to Table 22).

**Table 22 – Logistic Regression of the Significant Factored Variables Against the Computed Variable**

Dependent Variables	HOHIGHSPSTI	
Independent Variables	OR	(95% CI)
Trust	1.36**	(1.10 - 1.69)
Desire to Please	1.66**	(1.11 – 2.47)
Anxiety and Stress	.86	(.70 – 1.15)
Age	1.03	(.96 – 1.11)
Monthly Income	1	(1 – 1)

\* $p < .05$ , \*\* $p < .01$ , <sup>a</sup> = marginal significance

The result of this analysis provides evidence that the men who responded to questions about physical and emotional trust, fear of HIV, and general self-esteem reported lower numbers of sex partners in twelve months, no STIs, and never having an intention to have an open relationship. The variables desire to please their partner and the belief that sex is for commitment are significant predictors of reporting low number of sex partners in one year, no lifetime STIs and no intention to have an open relationship.

Other results beyond these related to the stated hypothesis include the survey data on the numbers of sex partner by partner type and the data supplied from the questions on the three different definitions of sex partners. The numbers of different types of sex partners, whether for twelve months or in a lifetime, demonstrate that the number of committed sex partners in twelve months or a lifetime is comparable to those for heterosexual men. What is still not clear is how casual and anonymous sex partnerships such as friends with benefits, fuck buddies and one-night stands compare with those of heterosexual men. Further study is needed on this. Informal discussions with young heterosexual men and women indicate that they may report similar numbers related to numbers of these types of sex partners.

The results of the question about the definition of sex partners suggest that there may be two primary definitions operating when a man reports on his numbers of sexual partners. In a crosstab analysis of the number of sex partners in twelve months and the number of committed sex partners in twelve months, one of the cases reported having three committed partners in the past year and the other case reported six committed sex partners in the past year, yet both of these men reported only one sex partner in twelve months. This was also true in a crosstab analysis of number of committed sex partners in twelve months and number of friends with benefits in twelve months. In this analysis, three men reported having one sex partner in twelve months and also reported two friends with benefits. Additionally one man reported three friends with benefits. This was also true for men who reported the number of sex partners in twelve months and the number of casual sex partners in twelve months. One man reported two sex partners in twelve months and then reported nineteen sex partners in twelve months. Clearly this could be due to recall bias, but may also be due to how these men operationalize their definition of a sex partner. More in-depth research is needed to better understand why these men can report such disparate differences in the number of sex partners.

## **5. DISCUSSION**

This study is innovative in the use of the Theory of Planned Behavior (TPB) to study the sexual partnering behavior of MSM. The anticipated outcome was to better understand intentions related to the behavior of male sex partnering, and predicting them by motivations, attitudes and beliefs related to this behavior. The assumption underlying the use of the TPB was that if a man was motivated toward sexual partnering by a need to relieve stress, anxiety, boredom, loneliness

or excitement and these motives were correlated with beliefs such as; internet sex being easier, or the beliefs that sex is good and healthy, and/or the belief that I should have all the sex I want these would predict the intention either have an open relationship or to be monogamous as well as predict high or low numbers of sex partners and number of STIs in a lifetime. The results of this study did not support the assumptions. The discussion that follows is an attempt to understand the meaning of these results as well as explore further study based on these results and the various attributes connected to sexual relationships covered in the introduction to this study.

The developers of the TPB recommend a particular methodology when applying this theory to a particular topic of study, which is a series of open-ended one-on-one elicitation interviews with at least fifteen to twenty individuals (Montano & Ksprzyk, 2002) for the purpose of understanding the particular motivations, attitudes, subjective norms and normative beliefs related to the intention to perform a particular behavior. For this study, twenty men were interviewed to elicit their perspectives on their own MABI related to sex partnering. These interviews were conducted in a structured but informal manner because it was important for the interviewer to establish a comfortable dialogue with the interviewee due to the sensitive nature of the subject matter. One benefit of the informal interview structure was the frequent spontaneous expressions of gratitude and relief from the interviewees upon completion of the interview. These expressions of gratitude were unexpected by the PI. It is difficult to know what to conclude from this observation and it may be a topic for further study, with a possible explanation that highly structured and formal interviews with MSM may not produce in-depth information, especially related to sexual behavior. One possible reason may be the stigmatization MSM endure because of their sexual orientation and the belief that they need to silence their

voices because of this stigmatization. Therefore, the ability to discuss the innermost motivations, attitudes, beliefs and intentions related to sexual partnering and sexual behavior may be cathartic and empowering. MSM tend to be an invisible segment of the general population. Many MSM may hide their sexual orientation because of actual or perceived societal taboos and stigma related to same sex attraction. Therefore, an invitation to an interview sharing sexual partnering experiences that is non-judgmental, safe and private may be validating and affirming to many MSM, most especially young MSM.

In addition to the method of interviewing recommended above, it is further recommended to study two groups, one group involved in the behavior to be studied and another group that is not, in other words, an experimental and a control group. For this study it was not possible to follow this recommendation because of the great difficulty in conducting a study with a group of MSM who have not engaged in any form of sexual partnering. In addition, this is an exploratory study focused on attempting to define previously unknown variables (MABI) and not an experimental study.

The recommended scales for the TPB are bi-polar scales encompassing the negative and positive such as Good and Bad or Likely and Unlikely rather than the range of responses, such as Always, Often, Sometimes and Never, characteristic of the Likert scale. The Likert scale was chosen for this study because the primary concern in constructing this survey was to ensure, as much as possible, a sex-positive and non-judgmental measure of MABI. Dichotomous variables such as, Good and Bad, Negative and Positive, are responses meant to report extremes of perception. In this case, the frequency that a man reports a motivation, attitude, belief or intention as part of the decision making process for acquiring a sex partner was more critical than if the man perceived a particular MABI as good or bad, right or wrong, likely or unlikely. This

did make it difficult to assess attitudes and points out a weakness of this study; the addition of bi-polar scales would add information on the judgments these MSM have toward various thoughts, beliefs and attitudes connected to sexual partnering. It may be true that only bi-polar responses can provide the kind of data that can connect motivations, attitudes and beliefs with the intention to perform a particular behavior. It was also important that survey questions be as consistent as possible in order to be less confusing to the respondent. In other words, the respondent would not need to switch between answering a bipolar scale and a Likert scale. These deviations from the recommended methodology may be reasons why this study did report any significant predictors of the intention to perform a behavior.

The introduction to this study discussed various attributes related to sex partnering or sexual relationships. It was not possible to explore all of these attributes, yet what has been explored has produced some interesting results. The first attribute to be discussed is sociosexuality, which is related to script theory. These concepts were discussed as important factors contributing to the formation of sexual partnerships of both heterosexual and homosexual sexual relationships, primarily dating. Sociosexuality as well as script theory state that decision making related to sexual partnering is based on the dynamic influences of social networks, the social rules of these networks, sexual networks and past experiences. The assumption here is that motivations, attitudes, beliefs and intentions are formed from the same dynamic influences involved in sociosexuality and the scripts related to sexual partnering. If it is possible to understand how exactly these scripts are formed it should be possible to predict types and numbers of sexual partners. It may also be assumed that MABI are associated with sexual partnering and there is relationship between these MABI and sexual scripts. The results of this study indicate that these

assumptions are not true. It was not possible to demonstrate that any of the MABI surveyed in this study could be significant predictors of numbers of sex partners.

Age is another key attribute of the sex partner connected to the decision making process related to sexual partnering. The assumption was that 18-28 year olds would answer MABI questions relating to motivations for sex related to excitement, the belief that I should have all the sex I want or lower self-esteem. *Always* or *Often* was answered more frequently than the older group, whereas, the assumption was that the 29-39 year old group may have answered *Always* or *Often* to the questions related to boredom or loneliness, or the intention to have an open relationship more frequently than the 18-29 year old group. The results of testing responses to questions of MABI between the two age groups (18-28 and 29-39 years of age) indicate there was no difference in the mean of the responses for either age group. Age, at least in the range of 18 to 39 years, did not seem to be an attribute greatly influencing the responses to the questions of MABI related to sex partnering. In both age groups, the choice of *Often* was indicated most frequently for all but a few MABI. The exceptions to the results above were that *Sometimes* or *Never* were answered with the questions related to motivations for sex because of a fear of rejection, loneliness, boredom, stress and anxiety by both groups.

These data indicate that MSM often have a number of MABI driving sexual partnering. It is not known yet how these MABI are acted upon. It may be that any one of these may drive sexual partnering depending on the context in which the decision is being made. Age is certainly a context for sexual partnering. For instance, anecdotally, many products are sold on the market to make people look younger and more sexually attractive. In the research literature, Steinman's study (1990) provides evidence that age may be one of the contexts operational in how MABI are activated. Further study is needed to test age as a factor driving sexual partnering because for

this study, respondents were not asked if a choice of sex partner was influenced by the age of the partner.

The next attribute to be discussed here is the acceptability of sex without love. As indicated above in the introduction, this attribute is an attitude toward sexual relationships which may indicate a greater number of sex partners in a lifetime for men, whether they are in a committed relationship or single. This study did not ask a specific question about the attribute of the acceptability of sex without love because this was not an attitude that the men in the interviews discussed. Therefore proxy variables were used for this attitude of sex without love. The proxy variables are sex motivated by excitement, loneliness, boredom, stress, anxiety, the belief I can have all the sex I want, and the intention to have an open relationship. Results of statistical analysis with these variables and the number of sex partners in twelve months and a lifetime, indicate that all these variables, except anxiety, are significantly correlated with higher numbers of sex partners in twelve months, and the variables stress and the intention to have an open relationship are correlated at the  $p < .05$  level for higher numbers of sex partners in a lifetime.

This does not mean that all men surveyed who intend to have an open relationship or are motivated for sex out of excitement, boredom or loneliness hold an attitude that sex without love is acceptable. Evidence from the interviews conducted for this study shows that there are men who intend to have an open relationship but agree to an exclusive monogamous relationship because of the strength of intention of their partner. These same men and others may believe they should have all the sex they want and hold this belief in the context of a committed sexually exclusive loving relationship and still have the attitude that sex without love is acceptable. These men may have this attitude but not act on it sexually because of the context of a stronger belief in a loving, sexually exclusive, committed partnership and therefore not report high numbers of sex



partners. This is an important consideration because it seems that knowing the motivations, attitudes, beliefs and intentions of a man may not be enough to predict sexual partnering behavior. A future study could compare the men who say they always or often intend to have an open relationship and their attitude about the acceptability of sex without love.

This study did not deal with the attractiveness of a sex partner and its relation to numbers of sex partners because, as cited above under the heading of Attributes and Attractiveness, a number of studies have already addressed this attribute of the sex partners for both heterosexual and homosexual men related to sexual partnering. Clearly attractiveness is a driving force in sexual partnering. Yet in terms of public health significance, it may be true that knowledge of this attribute does not offer an opportunity to improve STI prevention efforts.

In terms of the context in which MABI are active, it may be necessary to also understand whether there is a hierarchy to these MABI. Do some MABI override others? For example, would a need for sex out of loneliness be overridden by a belief that god does not approve of same-sex behavior. It was expected that motivations for sex because of being horny (n=8), lonely (n=8), bored (n=3) for romance (n=6) and acceptance (n=4) or the need to establish a more personal relationship (n=1) and sex motivated by insecurity (n=2) would have occurred more frequently but they did not. We may also need to understand how men are able to act when there is an interaction of MABI? Are there different contexts in which a particular motivation can be acted upon? For example, a man who is normally restricted in pursuing sex out of a need for excitement decides to throw caution to the wind after four drinks in a bar and has un-safe sex with a group of men in the back room of a bar because it is exciting or because he is inebriated. In this case, the context has a great deal to do with whether this man acts on the motivation or not.

There are a number of other conclusions to make from the results of this study. First of all, key community leaders were a valuable asset for the recruitment of participants. These key community leaders were chosen because of the trusted position they hold in the community. A trusted recruiter is essential when attempting to gather information on sensitive personal information from a hidden population such as MSM. The ability to stratify the convenience sampling was also important because it allowed for a broader cross section of men. For example, the choice of the bar Pegasus allowed for a larger number of men between 18 and 21 years of age while sampling men from gay sports leagues, the GLCC and the Pitt Men's Study allowed for the inclusion of more men over 21 and men closer to the outer parameter of 39 years of age.

The results of this study also indicate a need for attention when using "sex partner" in research questions aimed at collecting data about the numbers of sex partners and associated risky sexual behavior. Information provided by the study interviews along with the results of the survey questions related to the definition of a sex partner provided evidence for at least three different operational definitions of a sexual partnership. This information has implications for studies involving numbers of sex partners with MSM and how a survey respondent may or may not be reporting what the researcher intends to count. A man who defines a sex partner as someone who he has a committed long-term relationship and defines sex outside of this kind of relationship as "fooling around" or "playing," such as; friends with benefits (which means having sex with friends), fuck buddies, anonymous or casual sexual encounters would not count friends with benefits, fuck buddies, and anonymous or casual sexual encounters as sex partners. The implications of this issue of knowing the particular definition of a sex partner is that studies which have relied on the data from a question about the number of sex partners a man has may not be eliciting accurate information in terms of the data the researcher needs and what how the

respondent understands the question. The reality may be that the men who have stated they have only one or two sex partners in a year and have no STIs may have thirty sex partners in a year. If this is the case, studies should be looking at the protective factors related to sexual partnering for these men. For instance, is serosorting (knowledge of HIV status as a means of safer sex behavior) used by these men as a way to engage in safer sex behavior? Further research with a larger sample of MSM and a well-developed battery of survey questions may help to corroborate this result.

The responses to questions of MABI were correlated with the intention to be monogamous or to have an open relationship and these correlations demonstrate only a scattering of significant results that are difficult to interpret. A possible explanation for these results may be the lack of sufficient sample power to conclude definitively whether motivations, attitudes and beliefs of MSM for acquiring sex partners can predict intentions to behave in a certain manner. This study contained a large number of variables (26) and a sample of 150 men, which was the reason for factoring this large number of variables down to nine. A larger sample of men may provide different results; therefore, further study is needed.

A suggestion for further study would be to conduct elicitation interviews according to the methodology suggested by the TPB. Full identification of the behavior of sexual partnering as recommended by the TPB may also support further study to better understand the relationship of MAB to intentions. Full identification would include a measure of the context for acquiring sexual partners. Another suggestion for further study is to compare the responses of heterosexual men to the same questions of MABI related to sex partner acquisition provided in this study. This may provide further evidence of the efficacy of this theory in predicting the intentions related to sexual partnering and whether sample power was an issue in these results. In other

words, would the responses of heterosexual men demonstrate a significant difference from those of the MSM for this study?

Results of the test of the relationship of the variables *desire to please a sex partner* and the belief that *sex is for commitment* with lower numbers of sex partners, low STIs and never having an intention to have an open relationship are interesting but difficult to interpret. It is difficult to interpret from the survey data how the desire to please a sex partner affects having lower numbers of sex partners, low STIs and never having an intention to have an open relationship. One possible reason could be that these men who are oriented toward pleasing a sex partner are also men who view sex partnering as a means to an end, and that end is a long term commitment. This would be the reason these two variables factored together in the matrix of MABI variables. It is possible that these men only engage in sexual relationships when these relationships are accompanied by some form of dating and a sense of commitment. This would likely mean these men have fewer overall numbers of sex partners.

In terms of lower STIs, fewer sex partners cannot be the only answer. The men we are discussing here must also have some sense of protection related to sexual partnering. Fear of HIV did not factor in with these two variables of *desire to please a sex partner* and *never having the intention to have an open relationship*. It is possible these men do not possess a fear of HIV but rather a healthy respect for their own safety and well being. This seems to be corroborated by the overall results for this study. Trust is indicated as a major factor for these MSM when making decisions for sex partnering. The results of the logistic regression performed on the factored variables against the computed variable of low sex partners, no STIs, and the intention to never have an open relationship indicates that trust is a key factor in the acquisition of sex partners for MSM. Trust, both physical and emotional trust, appears to be a major factor with MSM when

making decisions about partnering for sex. While difficult to know exactly what this means when considering these the survey responses alone, the qualitative interviews provide some helpful insight. The men who were interviewed stated on more than one occasion that if they were considering a sexual encounter with a man who was anonymous or unfamiliar, then a sense of physical trust would be a primary consideration. Physical trust in this study is taken to mean an attitude that the object of sexual desire is someone who will not inflict physical harm. The men interviewed made a distinction between physical trust and emotional trust. Emotional trust was significantly important when making a decision about a long term commitment with another man. These men stated that they placed a high importance on the ability to feel emotionally safe with the man they were considering partnering with for the long-term. A level of trust must exist before considered for a long-term partnership. In other words, if the man says “I love you,” does he mean it or is it only meant to “get me into bed for sex.” This information suggests that support for long-term commitments of MSM may be protective against the transmission of STI.

These conclusions pointing to an attitude of trust, the belief that sex is for commitment and the primary concern to please a sex partner related to sexual partnering have public health significance. STI prevention programs could promote greater awareness of these attitudes of physical and emotional trust connected with the decision-making process of MSM for sex partnering. Promoting greater awareness of trust in relationships may strengthen the importance of these attitudes among MSM by encouraging a culture of trust. This awareness of trust may be promoted by conducting support groups of MSM focusing on issues related to physical and emotional trust and sexual partnering. This type of support and mutual encouragement should be protective of MSM by boosting self-esteem and influencing solid decision-making ability when choosing a sex partner. Further study on how this attitude of trust is related to sex and how it is

operationalized, is needed, to better understand how sexual partnering as well as high risk sexual behavior are affected. These conclusions also support the need to recognize and support a culture of sexual partnering that is based on a belief that sex is for commitment. This is not to be misinterpreted as meaning that multiple sex partners and sex outside of commitment is somehow not proper or safe. The conclusion to recognize and support a culture of sex partnering based on the belief that sex is for commitment has always been considered protective of lower rates of transmission of STIs. This is further evidence for the importance of this kind of culture of commitment related to sexual partnering for MSM in order to lower rates of transmission of STIs.

The purpose of this study was to explore a number of hypotheses that may provide a better understanding of the MABI driving sex partnership and possibly aid in the development of better STI prevention programs. The long-standing assumption is that multiple sexual partners indicate a higher incidence of risky sexual behavior. This study did not intend to study the correlation of risky sexual behavior with multiple sex partners. The primary intention was to determine if motivations, attitudes and intentions are involved in a sexual partnering rather than the resulting sexual behavior. A suggestion for further study is to correlate the various MABI in this study with data related to risky sexual behavior of MSM.

Much work is yet to be done in order to better understand what drives sexual partnering with MSM. This study indicates that various MABI have some influence on sexual partnering and the context of acquiring a sex partner may be what activates a particular MABI. The various contexts related to acquiring a sex partner need further exploration. This study was a first-generation study of MABI related to sex partnering among MSM. A more in-depth study is needed. This should include improving the survey instrument.

The men who were interviewed as well as the men responding to the survey commented about how thought-provoking it was for them. Therefore, to truly understand what the MABI are and how they relate to sexual partnering it may be necessary to employ a different kind of exploration. One suggestion is to develop a questionnaire consisting of open-ended questions. The responses could be coded and a database of responses created to which statistical analysis such as logistic regression, factor analysis, and independent t-tests could be applied. The survey used for this study contained a number of MABI variables; a larger sample may better determine reliability scales for this survey. A number of in-depth focus groups may also be needed in order to probe more deeply into the psyche of the men and develop their understanding of what drives their sex partnering.

A major weakness of this study was the lack of information on substance abuse and physical, emotional and sexual abuse, as well as the corresponding relationship to MABI related to sexual partnering. These variables were excluded from the study for two reasons. One, these variables would have significantly added to the length of the questionnaire and more resources would have been needed to conduct and analyze this survey. Secondly, questions related to substance abuse and physical, emotional and sexual abuse could have created a perception of judgment linked to an already sensitive topic of sexual partnering. The men's responses in the interviews reveal little mention or concern about substance or other forms of abuse. This is not to say these are not factors in the decision making process of MSM but may not be issues that are easily discussed without prompting.

The decision was made to directly focus this study on the internal drives for sexual partnering which were labeled here as MABI. This study was one attempt to add to the field of study related

to sexual relationships. There is much to learn, and this study has shown that many MSM are willing to participate in studies of this type.



## APPENDIX A: BACKGROUND

**Table 23 – Studies with Numbers of Sex Partners as a Risk Variable**

Study	Journal	Date	Goal of Study	Sex Partner Variable
Multicenter AIDS Cohort Study (Ostrow, David G, Silverberg, Michael J., Cook, Robert L., Chmiel, Joan S., Johnson, Lisette, Li, Xiuhong, Jacobson, Lisa P., 2007)	<b>AIDS Behavior</b>	<b>2007</b>	Sought to clarify the relationships between attitudes concerning sexual risk-taking, negotiated risk reduction arrangements, and partnership sero-concordance and the reported percentage of unprotected sex partnerships 6 to 12 months later among HIV-seropositive and HIV-seronegative MSM in the Multicenter AIDS Cohort Study(MACS)	Total number of recent (last six months) sexual partners. Participants grouped into with and without a primary partner. Then further divided those with a primary partner into: 1. Did not have any negotiated risk reduction agreement 2. Agreed there would no sex with others 3. Permitted sex with others.
A brief survey was administered to 247 MSM tourists recruited from gay-oriented venues in Key West, Florida (Benotsch, Eric G. Mikytuck, John J.; Ragsdale, Kathleen; Pinkerton, Steven D.; 2006).	AIDS PATIENT CARE and STDs	<b>2006</b>	The sexual risk behaviors of men who have sex with men (MSM) traveling to a popular gay tourist destination in the United States	The total number of anal sex partners; the number of these partners they first met on the present trip; the number of partners from Key West; how many partners told them that they were HIV-positive, HIV-negative, or did not disclose their HIV status; and with how many of their sexual partners they had shared their own HIV status
QuickStats from the national center for health statistics (QuickStats)	Morbidity and Mortality Weekly Report (MMWR)	January 2,  2006	Percentage of Persons Aged 15–44 Years Overall Tested for HIV* During the Preceding Year and Percentage by Number of Sex Partners of the Opposite Sex† — United States, 2002§	Number of sex partners 0 and >3
EXPLORE Study (Koblin , B.; Chesney, M.A.; Husnik, M. J.; Bozeman, S.; Celum, C.L.; Buchbinder, S.; Mayer, K.; McKirnan, D.; Judson, F.N.; Huang, Y.; Coates, T. J.; and the EXPLORE Study Team; 2003)	American Journal of Public Health	June 2003	Describe the risk profile of the study population at baseline and to determine the association between high-risk sexual behaviors and 2 known risk factors: (1) number and type (primary Vs. non-	1 primary partner >1 partners 1 non-primary partner

**Table 23 Continued**

			primary) of recent male sexual partners and (2) alcohol and recreational drug use	
A sample of 609 men was surveyed while attending a gay pride festival in Atlanta, GA (Benotsch, E.G. Mikytuck, J. J.; Ragsdale, K.; Pinkerton, S. D.; 2006)	Archives of Sexual Behavior	2002	This study examined the prevalence of Internet use for meeting sexual partners among men who have sex with men. The study also examined HIV risk behaviors among men who reported meeting a sexual partner via the Internet	Men meeting sexual partners over the Internet reported having sex with more male partners in the previous 6 months ( <i>M D 8:38</i> ) compared with men not meeting partners in this manner ( <i>M D 3:13</i> )
A Retrospective Cohort Study of Attendees at Three Urban Sexually Transmitted Disease Clinics in England (Hughes, G., Brady, A. R., Catchpole, M. A., Fenton, K.A., Rogers, P. A., Kinghorn, G. R., Mercey, D. E., and Thin, R N.;2001)	Sexually Transmitted Diseases	July 2001	To investigate the demographic and behavior characteristics of sexually transmitted disease (STD) clinic patients most likely to reattend with an STI	>3 partners compared with 1 sex partner in the recent past
Data are from a national volunteer phone-in survey of homosexually-active men in Australia (Crawford, J.M.; Rodden, P.; Kippax, S.; Van de Ven, P.; 2001).	International Journal of STD & AIDS	March 2001	This study examines patterns of agreement, knowledge and practice which can prevent or facilitate HIV transmission among men who are in regular (primary) male-to-male relationships	>1 sex partners for longer than 6 months
The 1988 and 1995 cycles of the National Survey of Family Growth and five rounds of the General Social Survey conducted from 1988 to 1996 (Finer, Lawrence B., Darroch, Jacqueline E., Singh, Susheela; 1999).	Family Planning Perspectives	1999	To examine women's and men's numbers of recent sexual partners. Levels of direct risk for STDs (two or more partners in the past year) and the social and demographic correlates of multiple partnership are analyzed among women and men. In addition, women's indirect risk for STDs (their partners' involvement with other partners in the past year) is used to estimate	The number of people with whom he or she had had sex in the 12 months preceding the interview. The 1995 NSFG also asked its respondents to report their number of (male) partners in the past 12 months. The primary measure of STD risk was having had two or more sexual partners in the past year

**Table 23 Continued**

			their overall risk of STDs through multiple partnerships.	
The National AIDS Behavioral Survey (Van der Straten, Ariane; Catania, Joseph A. and Pollack, Lance; 1998).	AIDS and Behavior	1998	Examined health-protective sexual communication (HPSC) with new sexual partners, in a national sample of heterosexuals	This study focuses on individuals who reported at least one <i>new</i> sexual relationship in the past year
A case control study of nested in a cross sectional survey among subjects attending a STI clinic in Northern Italy (Parazzini, F, Cavalieri D'Oro, L., Naldi, L., Bianchi, C., Graefembergh, S., Mezzanotte, C., Pansera, B., Schena, D., LaVecchia, C., Francheschi, S.; 1995).	International Journal of Epidemiology	1995	To analyze the relation between number of sex partners, selected sexual habits and HIV	Comparing one or no sexual partner over 3 years with those with 2-3, 4-5 and >6

**Table 24 - Search Terms for Partner Turnover Rates**

DATABASE	SEARCH TERM	RESULT
OVID (PsychInfo)	Partner turnover rates 1. exp Decision Making/ (34087) 2. exp Male Homosexuality/ or exp Sexual Risk Taking/ or exp Psychosexual Behavior/ or exp Risk Taking/ or exp Sexual Partners/ or exp Bisexuality/ (65492) 3. 1 and 2 (1777) 4. exp Male Homosexuality/ (6525) 5. 1 and 4 (47) 6. exp Psychosocial Factors/ or exp Social Behavior/ (347188) 7. 1 and 3 and 6 (1465) 8. from 5 keep 4-6,20,30-31,37 (7) 9. exp Sex Drive/ (498) 10. exp Sexual Partners/ (838) 11. exp Male Homosexuality/ (6525) 12. 9 and 10 and 11 (1) 13. from 12 keep 1 (1) “sex partners”	No Results
PubMed	Partner turnover rates sex partners homosexuality and sex partners	No result 2924 704
GOOGLE SCHOLAR – (Health Services Library)	“partner turnover rates” “partner turnover rates and MSM” “acquiring sex partners” “partner turnover” “partner turnover and MSM”	6 results no results  4 results 121 results no results

## APPENDIX B: QUALITATIVE PHASE

### SCRIPT FOR RECRUITING STUDY PARTICIPANTS

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#### EXPLORING THE MOTIVATIONS, ATTITUDES, BELIEFS AND INTENTIONS OF MEN WHO HAVE SEX WITH MEN FOR ACQUIRING SEX PARTNERS

*Recruiter:* Hello, my name is \_\_\_\_\_ could I talk with you a few minutes about an interesting new research study. This is an anonymous study and your name or identifying information will not be used.

*Respondent:* Yes (if Yes recruiter will go on. If No, recruiter will say “Okay and thank you for letting me ask you.”)

*Recruiter:* Great! Thank you. The study is exploring the motivations, attitudes, beliefs and intentions of men who have sex with men to acquire sex partners. No one has ever tried to understand what goes on with men who have sex with men, also referred to as MSM, as they make decisions about obtaining sex partners. One of the interesting things about this study is trying to understand if there is a relationship between how men who have sex with men acquire sex partners and sexually transmitted disease. Would you like to know more?

*Respondent:* Yes (If Yes recruiter will go on, If No, recruiter will say “Okay, thank you for letting me tell you about the study.”)

*Recruiter:* Good. I am helping the person responsible for the study. His name is Chuck Christen. There are two phases to this study. The first phase will consist of 20 interviews with MSM who are between 18 and 39 years of age who have given their consent to be part of the study. The purpose of these interviews is to have a deeper understanding of the motivations, attitudes, beliefs and intentions of MSM for acquiring sex partners. The interviews will be conducted only by Chuck, who heads this study and the information from these interviews will be anonymous. The information gained in these interviews will be used to develop a new questionnaire, which will then be administered to 150 MSM. Do you think you would be interested in being interviewed for this study?

*Respondent:* Yes. (If yes the recruiter goes on, if No, the recruiter says “I appreciate your interest and can I ask you if you would be willing to share with me your reason for not wanting to participate? If No recruiter says “Thank you and I will be on my way now.” If yes, then recruiter listens for the reason. After receiving the information, the recruiter asks if it is okay to share this with the principal investigator (no names will be shared). If yes, the recruiter writes this down later and gives it to the principal investigator. If No, then the recruiter says thank you for what you have shared and I appreciate your time. I will be on my way now.)

*Recruiter:* Great! I am going to give you a card with the contact information for Chuck Christen. Give him a call or contact him by email. If you would rather he get in touch with you, I would need a name (it doesn't have to be your real name if you don't want to give this to me) and a phone number or email address.

*Respondent:* Indicates his preference

*Recruiter:* Thank you and Chuck and I both appreciate your willingness to help out with this study.

**Figure 6 – Recruiting Script**

**EXPLORING THE MOTIVATIONS, ATTITUDES, BELIEFS AND INTENTIONS OF MEN WHO  
HAVE SEX WITH MEN FOR ACQUIRING SEX PARTNERS**

- a. You are being asked to participate in a research study exploring the motivations, attitudes, beliefs and intentions (MABI) of men who have sex with men (MSM) for acquiring sex partners. One primary goal of this research is to develop a reliable and valid measure of MABI related to partner acquisition with MSM in order to better understand the relationship of MABI to sex partner acquisition and perhaps sexually transmitted disease. At this time the focus of the study is with MSM who are between the ages of 18 to 39 years of age, in Southwestern PA, speak English and have had one or two or over ten sex partners in the past year.
- b. If you decide to take part in this research study, you will be asked to participate in an anonymous one hour face to face interview with the principal investigator for this study. You as a voluntary participant are asked not to share your full name and you can use a pseudo name if you wish. With your permission the interview will be recorded digitally with no identifying information attached. You will be asked about your habits related to sex partnering, especially about your motivations, attitudes, beliefs and intentions related to your sex partnering habits. You will also be asked about sex partners in the past year, types of sex partners and sexual behavior with these partners. You will be compensated \$40.00 for your participation.
- c. The anticipated risks to participation in this interview are some embarrassment or uncomfortableness talking about sensitive issues such as sex partnering. There may be a risk of remembering a sexual experience that was traumatic or stressful. If undue stress or difficulty emerges because of your participation in this interview you will be given a referral to a competent counseling agency will be provided. You will be told promptly of any new risks that may be found during the course of the study.
- d. Any information about you obtained from this research including your comments in the interview are anonymous. Since this is an anonymous interview your name will not be identified in any publication or literature connected with this research unless you sign a separate consent form giving your permission (release). It is important to note at this time that the Principal Investigator is a mandate reporter related to information that is shared of a criminal nature such as incest, sex with a minor, and your involvement of the rape of another. Your participation in this research study is completely voluntary. You are free at any time to withdraw at any time. This study is being conducted by Charles Christen, who can be reached at 412-965-7679 or [clc142@pitt.edu](mailto:clc142@pitt.edu).

**Figure 7 – Script for Informed Consent with Participant**

**Table 25 – Coding Tree**

<p><b>SEX/SEX BEHAVIOR (33)</b></p> <ol style="list-style-type: none"> <li>1. Anal Sex (20)</li> <li>2. Oral Sex (15)</li> <li>3. Top (9)</li> <li>4. Bottom (10)</li> <li>5. Versatile (5)</li> <li>6. Top but Prefer Bottom (2)</li> <li>7. Kinky Sex (3)</li> <li>8. Vanilla Sex (3)</li> <li>9. Masturbation (10)</li> <li>10. Mutual Masturbation (1)</li> <li>11. Role Play (4)</li> <li>12. Fantasy (9)</li> <li>13. Genital Sex (6)</li> <li>14. Touch (5)</li> <li>15. Early Sexual Experiences (20)</li> <li>16. Bare backing (5)</li> <li>17. Foreplay (4)</li> <li>18. Fooling Around (5)</li> <li>19. Rimming (3)</li> <li>20. Sad after sex (3)</li> <li>21. Safer Sex (4)</li> <li>22. Creative Play with Sex (5)</li> <li>23. Porn (6)</li> <li>24. Sex is Serious (2)</li> <li>25. Visual Aspect to Sex (2)</li> <li>26. Depression and Sex (1)</li> <li>27. Sex Addiction (3)</li> <li>28. Fucking (4)</li> <li>29. Orgasm (2)</li> <li>30. Sex is satisfying (2)</li> <li>31. Infrequent Sex (1)</li> <li>32. Fetish (3)</li> <li>33. Flirting no Sex (1)</li> </ol>	<p><b>SEX PARTNERS (20)</b></p> <ol style="list-style-type: none"> <li>1. Definition of a Sex Partner (25)</li> <li>2. Dating (29)</li> <li>3. Friends with Benefits (21)</li> <li>4. Fuck Buddies (5)</li> <li>5. Frequent Sex Partner (9)</li> <li>6. Anonymous Sex (17)</li> <li>7. Casual Encounter (19)</li> <li>8. Open Relationship (7)</li> <li>9. Open Relationship and Happy (3)</li> <li>10. Monogamous and Exclusive (12)</li> <li>11. Monogamous and Happy (3)</li> <li>12. New Sex Partner (7)</li> <li>13. Online Sex Encounter (11)</li> <li>14. Number of Sex Partners (16)</li> <li>15. Sexual Encounter (5)</li> <li>16. More than just sex (10)</li> <li>17. Not Searching Partner Comes to Me (1)</li> <li>18. Experimenting (1)</li> <li>19. Quickie (5)</li> <li>20. Companion/Friend (12)</li> </ol>
<p><b>Motivation (23)</b></p> <ol style="list-style-type: none"> <li>1. Anxiety (5)</li> <li>2. Boredom (3)</li> <li>3. Loneliness (8)</li> <li>4. Excitement (1)</li> <li>5. Thrill (6)</li> <li>6. Conquest (5)</li> </ol>	<p><b>Attitudes (13)</b></p> <ol style="list-style-type: none"> <li>1. Sex is Easy (5)</li> <li>2. Sex is Relational (22)</li> <li>3. Fear of STD/HIV (7)</li> <li>4. No Sexual Freedom (3)</li> <li>5. Relative to Place in Life (1)</li> <li>6. Trust (physical and emotional) (9)</li> </ol>



**Table 25 Continued**

<ul style="list-style-type: none"> <li>7. Attraction (11)</li> <li>8. Body Image (10)</li> <li>9. Horny (8)</li> <li>10. Happy (1)</li> <li>11. Intimacy (23)</li> <li>12. Release of Tension/Sexual Desires (17)</li> <li>13. Romance (6)</li> <li>14. Sex as a ground for relationship (5)</li> <li>15. Sex for Fun or Sport (18)</li> <li>16. Acceptance – (4)</li> <li>17. Fear of Rejection (2)</li> <li>18. Motivated by Internal Feelings rather than Visual (2)</li> <li>19. Affection (1)</li> <li>20. Shame (4)</li> <li>21. Lust/Carnal Desire (2)</li> <li>22. Passion (4)</li> <li>23. Love and Sex (9)</li> </ul>	<ul style="list-style-type: none"> <li>7. Self-esteem (10)</li> <li>8. Open Emotionally/Closed Emotionally (3)</li> <li>9. Spirituality important part of sexual decision making (4)</li> <li>10. Primary Concern is to Please the Other (1)</li> <li>11. Difficulty finding Mr. Right (1)</li> <li>12. Pursue/Pursuer (2)</li> <li>13. Confidence (4)</li> </ul>
<p style="text-align: center;"><b>Beliefs (12)</b></p> <ul style="list-style-type: none"> <li>1. Sex is morally good (6)</li> <li>2. Sex is morally bad (3)</li> <li>3. Online Sex is Easy (7)</li> <li>4. Support of Family and Friends Important (2)</li> <li>5. Online Sex is Fearful and a Hassle (1)d</li> <li>6. Sex is Healthy (9)</li> <li>7. Sex as Obligation/Peer Pressure (2)</li> <li>8. Safety/Comfort (7)</li> <li>9. Commitment/Investment (24)</li> <li>10. Sex Better when Partnered/Bonded (11)</li> <li>11. Communication (13)</li> <li>12. Meeting in Bars Not So Good for Meeting Sex Partners (2)</li> </ul>	<p style="text-align: center;"><b>Intentions (7)</b></p> <ul style="list-style-type: none"> <li>1. Monogamy (1)</li> <li>2. Finding Mr. Right (8)</li> <li>3. Open Relationship (7)</li> <li>4. Relationship Oriented (16)</li> <li>5. Caring and Support (3)</li> <li>6. Caretaker (1)</li> <li>7. To be Polyamorous (1)</li> </ul>

**Table 25 Continued**

<p><b>MISC (26)</b></p> <ol style="list-style-type: none"> <li>1. Health (4)</li> <li>2. Sexual Orientation (3)</li> <li>3. Insecurity (2)</li> <li>4. Abuse (2)</li> <li>5. Control and Giving Up Control (6)</li> <li>6. Depression and Sex (1)</li> <li>7. Not Much Conversation (2)</li> <li>8. Repressed Family Life (1)</li> <li>9. Friends without Sex(7)</li> <li>10. Share Feelings (1)</li> <li>11. Turning Point In Relationships (2)</li> <li>8. Disappointment (10) Emotions (6)</li> <li>9. Sex Satisfying (2)</li> <li>10. Long Distance Relationship (2)</li> <li>11. Compatible but not able to be with (5)</li> <li>12. Feeling of being taken advantage of (2)</li> <li>13. Hard to Get (3)</li> <li>14. Length of Time Together (2)</li> <li>15. Stigma of Being a Bottom (7)</li> <li>16. Judgment about Sexual Behavior (4)</li> <li>17. No Judgment about Sexual Behavior (2)</li> <li>18. Masculinity and Sex (1)</li> <li>19. No Confusion about Gender and Homosexuality (1)</li> <li>20. Feeling Taken Advantage of (2)</li> <li>21. Expectations (4)</li> <li>22. Sexual Experiences (1)</li> <li>23. Sexual Freedom (16)</li> <li>24. Gay marriage not necessary (2)</li> <li>25. Aggressive (3)</li> <li>26. Taboos (3)</li> </ol>	<p><b>STD/HIV (8)</b></p> <ol style="list-style-type: none"> <li>1. Alcohol/Drugs (5)</li> <li>2. Safer Sex (4)</li> <li>3. HIV Testing (5)</li> <li>4. Fear of STD/HIV(7)</li> <li>5. Partner and HIV Testing (1)</li> <li>6. Bare backing (5)</li> <li>7. Sex without Condoms (9)</li> <li>8. Partner HIV/STD testing (1) Safe Sex with Condoms (23)</li> </ol> <hr/> <p><b>Early Development (4)</b></p> <ol style="list-style-type: none"> <li>1. Homophobia (4)</li> <li>2. Religion and Sex (8)</li> <li>3. Turning Point in Development (16)</li> <li>4. Coming Out – (21)</li> </ol>
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Table 26 – List of Repeating Ideas from Qualitative Interviews

1.	"I like having sex with my friends more than having sex with strangers."
2.	"I guess you could say I put on a different persona if I am meeting someone and I know I am never going to see them again."
3.	"But we work great together. "
4.	"I guess in some way I am looking for some kind of connection."
5.	"I just got to the point where you know I have seen everything and I know everyone that is out there. I am very happy with you. You know I am ready to make the commitment."
6.	"I just really like that partnership that partnering."
7.	"I don't like monogamy."
8.	"He treats me like gold."
9.	"I fantasize."
10.	"The Unattainable."
11.	"Safety is important."
12.	"I felt so glamorous."
13.	" I kinda of disappeared in my faith."
14.	"I am a sex positive person."
15.	"I am in Pittsburgh now."
16.	"Virgins are crazy."
17.	" They won't talk to you because you don't look a certain way.."
18.	"It is always a thrill."
19.	"It is something for me to think about and do while I don't have anything else going on."
20.	" Yeh its just kinda relaxation thing."
21.	"I feel I have to do it because there is some kind of obligation."
22.	"There are no obligations."
23.	"long I have dealt with sexual addiction."
24.	"It was easier to find someone to share bodily fluids with than to share a dinner with."
25.	"It has an awful lot to do with the state of mind and conditioning and the triggers that come up."
26.	"It is larger and that for some men that seems to establish this predominance."
27.	"I am normally pretty passive."
28.	"Trust is very important."
29.	"It depends on if I am looking to hook up for sex and only sex."
30.	" So many gay men try to define themselves by sex."
31.	"I don't fit the certain mold that gay men want."
32.	"This is what is comfortable for me right now."
33.	"We uh tend to be attracted to someone masculine you know, strong"
34.	"A kinda environmental response to this is something I can control."
35.	"I wouldn't say boredom. Loneliness yes."
36.	"I don't want to mix those two together."
37.	"I feel it's important that we have our separate interests."
38.	"I am a social worker."

## APPENDIX C: QUANTITATIVE PHASE

# SURVEY



### Sex Partners, Motivations, Attitudes, Beliefs and Intentions

Thank you for participating. Please answer each question below as best you can. There are no “right” answers. Circle the response that best fits you or fill in the blank when appropriate for each item. If you do not want to answer a question please circle or indicate “Prefer Not To Answer.” When you have completed all the questions return the questionnaire to the person who gave it to you. You will be paid \$15 for your completed questionnaire.

*In the questions below, sex is defined as any kind of sexual activity with another man*

Please circle the best answer for you  
DK = Don't Know, PNTA = Prefer Not to Answer

	Always	Often	Sometimes	Never	DK	PNTA
1. When you have sex with men, how often is it for excitement?	5	4	3	2	1	0
2. When you have sex with men, how often is it for companionship?	5	4	3	2	1	0
3. When you have sex with men, how often is being “horny” the reason?	5	4	3	2	1	0
4. If or when you are in a committed relationship with another man, how often is it your intention to have sex with only him?	5	4	3	2	1	0

**GO ON TO NEXT PAGE**

	Always	Often	Sometimes	Never	DK	PNTA
5. When you have sex with men, how often is it based on fear of being rejected by that man?	5	4	3	2	1	0
6. When you have sex with men, how often is it because you are lonely?	5	4	3	2	1	0
7. When you have sex, how often is it because you are bored?	5	4	3	2	1	0
8. If or when you are in a committed relationship, how often is it your intention to have sex with other men?	5	4	3	2	1	0
9. When you have sex with men, how often is emotional trust important?	5	4	3	2	1	0
10. When you have sex with men, how often is trust that allows you to feel physically safe important?	5	4	3	2	1	0
11. When you have sex with men, how often is it to relieve stress?	5	4	3	2	1	0
12. When you have sex with men, how often is it to relieve worry or anxiety?	5	4	3	2	1	0
13. When you have sex, how often is it because of a need for intimacy or closeness with another man?	5	4	3	2	1	0
14. When you have sex with men, how often is it because of the need for romance with another man?	5	4	3	2	1	0
15. When you have sex with men, how often are the choices you make about sexual behavior affected by fear of HIV or STD's?	5	4	3	2	1	0
16. When you have sex with men, how often is it because you want to test out a long term relationship with another man?	5	4	3	2	1	0
17. How often, in general, is your self-esteem high?	5	4	3	2	1	0

**GO ON TO NEXT PAGE**

	Always	Often	Sometimes	Never	DK	PNTA
18. How often is your major concern to please the other person when having sex?	5	4	3	2	1	0
19. How often do you use a condom to receive anal sex?	5	4	3	2	1	0
20. How often do you use a condom when you give anal sex?	5	4	3	2	1	0
21. How often do you use a condom when giving oral sex?	5	4	3	2	1	0
22. How often do you use a condom when receiving oral sex?	5	4	3	2	1	0

---

***For each of the questions below, please circle the answer that best fits you***

	Always	Often	Sometimes	Never	DK	PNTA
23. Do you believe, that overall, sex is good for you?	5	4	3	2	1	0
24. Do you believe, that overall using the internet is easier for obtaining sex with men than other ways (e.g.. going to a bar)?	5	4	3	2	1	0
25. Do you believe, that overall, god (whatever definition you give to god) approves of the sex you have with men?	5	4	3	2	1	0
26. Should you be free to have all the sex you want?	5	4	3	2	1	0
27. Do you believe, that overall, sex is healthy?	5	4	3	2	1	0

***GO ON TO NEXT PAGE***

	Always	Often	Sometimes	Never	DK	PNTA
28. Should sex with another man happen only within a long term committed relationship?	5	4	3	2	1	0
29. Would you consider yourself to be religious?	5	4	3	2	1	0
30. Would you consider yourself to be spiritual?	5	4	3	2	1	0

*For the questions below, please circle the answer that best suits you.  
DK= Don't Know, PNTA= Prefer Not to Answer*

31. Have you ever had an STD in your lifetime?            YES        NO            DK        PNTA

IF YES, HOW MANY DIFFERENT TIMES? \_\_\_\_\_

32. Has a health care provider ever told you that you have HIV?

YES        NO            DK        PNTA

33. When you engage in sex what position do you usually take?

TOP    BOTTOM    VERSATILE    DK    PNTA

34. *Please circle the definition that best fits your own:*

- a. A sex partner is someone you are intimate with and know as more than an acquaintance.
- b. A sex partner can be someone you are intimate with and know as more than an acquaintance or can be a person you meet just for the purpose of genital sex.
- c. A sex partner is primarily for genital sex.

**Based on your definition above, please fill in the blanks below as accurately as possible:**

35. In the past **6 MONTHS** how many **Male Sex Partners** have you had? \_\_\_\_\_  
How many **Female**? \_\_\_\_\_

36. In the past **12 MONTHS** how many **Male Sex Partners** have you had? \_\_\_\_\_  
How many **Female**? \_\_\_\_\_

**GO ON TO NEXT PAGE**

37. In your **LIFETIME** how many **Male Sex Partners** have you had? \_\_\_\_\_  
How many **Female**? \_\_\_\_\_

38. In the past **12 MONTHS** how many of the men with whom you had sex with were committed with you to more than just sex? \_\_\_\_\_

39. In **YOUR LIFETIME** how many of the men you have had sex were committed with you to more than just sex? \_\_\_\_\_

40. In the past **12 MONTHS** how many of the men you had sex with would you call “friends with benefits” (*meaning another man who you are acquainted with and share a friendship*)?  
\_\_\_\_\_

41. In **YOUR LIFETIME** how many of the men you have had sex with would you call “friends with benefits” (*meaning another man who you are acquainted with and share a friendship*)?  
\_\_\_\_\_

42. In the past **12 MONTHS** how many of the men you had sex with would you call “fuck buddies” (*meaning another man who you have regular or occasional sex with but have no relationship other than sex*)? **[If “fuck buddy” and “friend with benefits” mean the same thing to you only answer one of the questions]** \_\_\_\_\_

43. In **YOUR LIFETIME** how many of the men you have had sex with would you call “fuck buddies” (*meaning another man who you have regular or occasional sex with but have no relationship other than sex*)? **[If “fuck buddy” and “friend with benefits” mean the same thing to you only answer one of the questions]** \_\_\_\_\_

44. In the past **12 MONTHS** how many of the men with whom you have had sex with would you say were “a trick,” or one-night stands and you did not know at all? (*In other words were anonymous*) \_\_\_\_\_

45. In **YOUR LIFETIME** how many of the men with whom you have had sex with would you say were “a trick,” or one-night stands and you did not know at all? (*In other words were anonymous*) \_\_\_\_\_

46. In the past **12 MONTHS** how many of the men with whom you have had sex with would you say were “a trick,” or one-night stands and you knew only casually, even if briefly?  
\_\_\_\_\_

47. In **YOUR LIFETIME** how many of the men with whom you have had sex with would you say were “a trick,” or one-night stands and you knew only casually, even if briefly?  
\_\_\_\_\_

**GO ON TO THE NEXT PAGE**



*The information below is important for this study. If you care not to answer please write or circle PTNA (Prefer Not To Answer). Remember this is*

48. Please circle the answer which best describes your sexual identity.

Homosexual    Bisexual    Mostly Heterosexual    Heterosexual    DK    PTNA

49. At what age did you first realize that you were attracted to men and wanted to have sex with men?

\_\_\_\_\_

50. Have you ever told members of your family that you have a sexual attraction to men (i.e. that you are gay or bisexual)?

YES            NO            DK            PTNA

51. How old were you when you told them? \_\_\_\_\_

52. Have you ever told a friend or friends that you have a sexual attraction to men (i.e. that you are gay or bisexual)?

YES            NO            DK            PTNA

53. How old were you when you told them? \_\_\_\_\_

54. Have you ever told a co-worker or co-workers that you have a sexual attraction to men (i.e. that you are gay or bisexual)?

YES            NO            DK            PTNA

55. How old were you when you told them? \_\_\_\_\_

56. Birth Date: \_\_\_\_\_

57. Race/Ethnicity \_\_\_\_\_

58. Monthly Income \_\_\_\_\_

59. Education (Last grade level completed; for example: high school, technical school, college or graduate school, etc). \_\_\_\_\_

**Thank you very much for your time and willingness to complete this  
survey!**

**Please return the survey to the person who gave it to you.**

**Figure 8 - SURVEY**

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