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Beneficial or adverse? Exploring the association between Internet content consumption and sexual identity among single gay men who use the Internet in Guangdong, China

by

Liqi Huang

A thesis submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Sociology

Program of Study Committee: Wendy Harrod, Major Professor Stephen Sapp Amy Froelich

Iowa State University
Ames, Iowa
2013

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ABSTRACT

The purpose of this research is to explore the relationship between homosexual identity and the Internet, using an online sample from Southern China. The goals of this research are (1) to document the nature of participants' homosexual identity (including their history of sexual experiences, their level of self-acceptance, and their fears of disclosure); (2) to describe participants' Internet use and attitudes (including the functions they most frequently use, and how much they value the anonymity provided by the Internet); and (3) to explore the relationships between these two sets of factors.

Using secondary data from an LGBT oriented website in Guangdong, China, I conducted correlational and mediation analyses. Results reveal support for most of the hypotheses, except that Internet use had little to do with participants' level of sexual identity. A strong mediation effect was found between low self-acceptance and high perceived importance of Internet anonymity, with disclosure comfort mediating the relationship. Findings suggest that more qualitative research is needed in order to better understand the function of the Internet in sexual identity formation among gay men in Southern China.

CHAPTER I

INTRODUCTION

The Internet has become the platform facilitating the sexual and social network construction among gay and bisexual men in China. By virtue of its perceived anonymity, the Internet has gained increasing popularity since its booming in the 1990s in China among gay and bisexual men, whose discourse of sexual identity is substantially constrained by cultural taboo, media regulations, and social stigma. In light of the new technology that reveals those who otherwise remain hidden, scholars of Public Health and HIV Epidemiology began to deem the Internet to be a platform to conduct behavioral assessment of the gay and bisexual population in China. The growing body of pertinent research, however, indicates an association between sexseeking on the Internet and high-risk sexual behaviors, casting a shadow over the new-born technology. Yet such research overlooks the significance of the cyber world for the sexually oppressed and is fixated on the behavioral dimension while there are more layers to the issue. For instance, online LGBT communities are emerging as a platform for solidarity and selfexploration. Given the unique trajectory of ideology shift in contemporary China, I contend that the Internet has a beneficial and non-negligible influence on sexual identity formation and development among gay and bisexual men who frequent the World Wide Web.

Sexual identity development

The development of sexual identity consists of two parts – the formation and the integration of sexual identity. Erikson (1968, 1980a, 1980b) points out that, while the formation of identity deals with the internal reality of the individual that starts to assert and demand its expression, the integration of identity involves the process of unfolding the true "self" and the desire to be known by others over time. Inner commitment and solidarity are the concerns of

identity integration. For the LGB group, the process of identity development can be complex and often difficult (Rosario, Schrimshaw, & Hunter, 2004, 2011). That is, it often entails the struggle to fit the identity within the context of ignorance, prejudice, and even violence (Bontempo & D'augelli, 2002). Another qualitative study (Wilson et al., 2010) also emphasizes the effect of the negotiation regarding the dominant ideology – that is, how to obtain balance between the LGB identity and the mainstream perception of men. Some researchers (Morris, 1997; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001; Rosario, Schrimshaw, Hunter, & Braun, 2006) believe that the integration has more to do with LGB-related social activities, comfort with other individuals discovering their LGB identity, and "coming out" (disclosure of the LGB identity) to the others. In addition, these aspects are linked to psychological adjustment among the LGB population, meaning that the openness of one's sexuality and the involvement in the LGB community are positively associated with psychological adjustment.

It might be supposed that early identity formation would lead to positive psychological adjustment, but this had not been supported by research. Studies have shown no evidence to support a relation between suicidal ideation, depression/anxiety and the late timing of identity formation (D'Augelli, 2002; Igartua, Gill, & Montoro, 2003). Also, one of the major shortcomings of studying the formation process is that relevant research is almost always based on retrospective recall, which would distort the findings due to the respondent's tendency to maintain internal consistency (Rosario et al., 2006).

From a Western point of view, among gay and bisexual men, when a deviant identity (Goffman, 1963) (i.e. attraction to the same-sex) begins to emerge, their psychological well-being is likely to be threatened, thus causing an adverse psychological outcome known as internalized homophobia. A similar process may also apply to gay men in China. Due to

Chinese restrictions on media regarding homosexuality and pertinent negative reports, gay and bisexual men would inevitably internalize societal anti-homosexual attitudes. Consequently, stigmatization and discrimination against homosexuality would cause incongruence between personal needs and social norms (Durkeim, 1951; Moss, 1973), which calls for corresponding psychological adjustments.

Social representation theory can provide one example of such adjustments. It suggests that people are prone to using stigmatizing, blaming and stereotyping attitudes to cope with the anxiety caused by their sexual identity. They blame the marginalized "out-groups" so as to obtain the feeling of safety (e.g. Goodwin, Kozlova, Nizharadze, & Polyakova, 2004; Joffe, 1999). Further, the AIDS risk reduction model (Catania, Coates, & Kegeles, 1994; Catania, Kegeles, & Coates, 1990) also indicates that sexual minorities are inclined to avoid labels so as to distance themselves from the so-called "high risk population." For instance, one may perceive that, as long as he is not "gay," he is less likely to infect HIV. Therefore, by marrying a heterosexual woman, one could alienate himself from the ingroupers, namely, men who have same-sex desires. This is corroborated by the fact that most heterosexual married men who identify themselves as either gay or bisexual do not cease to seek male sex partners after their marriage.

Nevertheless, many researchers, especially those from other non-Western cultures, have challenged the behavior-centered models for homosexuality, namely that the focus is heavily placed on individual's behavior patterns in terms of sexual identity rather than the social settings behind it, in different cultural settings. That is, the behavioral dimension is not sufficient in understanding homosexuality in a non-Western culture. These researchers call for a multi-dimensional approach to sexuality with more emphasis on the *meanings* attached to the behavior

in a specific cultural context rather than merely a simple biomedical approach (e.g. Asthana & Oostvogels, 2001; Blanc, 2005). Chinese culture may have structured the conception of homosexuality by emphasizing the importance of social roles (e.g. familial piety), and therefore, same-sex behavior can be open to various interpretations rather than being solely about the development of homosexual identity. The next section serves to provide some background information about the study location and population.

A brief history of sexuality and the associated culture in China

Marriage has played a vital role in society throughout Chinese history. The ancient Confucian philosopher Mencius argued that, of the three ways for a son to neglect his filial duties, failing to procreate was the most serious. Thus, historically for all Chinese men – whether straight, gay or bisexual – marrying a woman and having a child has been not an option but rather a requirement in order to fulfill one's duty to the family (Chou, 2000). Once this expectation has been met, however, the man is considered to have preserved the family's "face" and thus gains greater freedom in terms of personal needs and behaviors.

Contemporary research in Western societies assumes that a gay or bisexual man who has entered into a heterosexual marriage reflects some degree of identity incongruity, inadequate psychological adjustment, and/or hostility to same-sex sexuality (i.e., homophobic stigma) in society (Malcolm, 2008; I. H. Meyer, 1995; Ross, 1983). However, a body of research among Chinese non-heterosexual male adults (e.g. Chou, 2000; P. Liu & Chan, 1996) finds that the Western concept of sexual orientation may not have similar socio-cultural valence for Chinese gay and bisexual men who have entered into a heterosexual marriage. Yet some scholars (Higgins & Sun, 2007; P. Liu & Chan, 1996; Zheng & Zheng, 2011) have argued that as China becomes increasingly integrated into the global community, non-indigenous influences are likely

to reshape native conceptions surrounding such issues as marriage (i.e., morphing it from a family/kinship arrangement to a more personal decision), which in turn will reshape attitudes toward sexuality, sexual identity, and institutions such as traditional (i.e., heterosexual) marriage. Since there exist various colloquial terms referring to the concept of being "gay" in China, I use "homosexual" or "homosexuality" as a general term to maintain consistency throughout the section.

Same-sex intimacy in ancient China

Unlike in most Western societies, male same-sex intimacy was widespread and tolerated in ancient China if the familial obligation of marriage was fulfilled (Chou, 2000; Wu, 2003; Zhou, 2006). A large body of historical literature has asserted that sex between men was quite common among the social elites of China. Chou (2000) suggests that as long as the male elites maintained hierarchical power in the existing class structure, penetrating the socially inferior male would serve as a symbol of social status (p. 103). Other researchers (Li, 2002; D. L. Liu, 1999; Z. Wang, 2004) have argued that same-sex behavior could be tolerated if a man were to fulfill his designated gender role by continuing the family line.

Based on traditional Taoist beliefs, sexual intercourse within heterosexual marriage could be viewed as a means to maintain balanced *chi* (i.e., life essence). That is, achieving equilibrium between the *yin* essence and *yang* essence would require "moderate" amounts of sexual intercourse between a man and a woman. Yet, since orgasms between two men could be regarded as exchanges of the *Yang* essence that did not disrupt the balance of *chi*, sexual intercourse between two men would not be considered problematic or taboo, *per se*.

Recognition and tolerance of male homosexual behavior, however, does not equate to acceptance. No equivalent linguistic term for "gay," "lesbian," or "bisexual" existed in ancient

Chinese, nor did a general term for "homosexuality." The closest references are *long yang*, *duan xiu* (cut-sleeve), and *fen tao* (dividing the peach), all of which stemmed from the anecdotes of social elites in ancient China. These terms, however, merely described the nature of same-sex intimacy within the privileged class. Chou (2000) suggests that these behaviors were in fact demonstrations of hierarchical power where no emphasis was placed upon sexual identity. Although the strata of society in ancient China that practiced polygamy regarded homosexual behavior as an integrated part of familial sexual life (Ruan, 1991), the precondition, again, was that a man marries a woman and father legitimate offspring to continue the family line (Wu, 2003).

Homosexuality in 20th century China and beyond

The First Opium War in 1840 exposed China to Western powers, which began eroding traditional conceptions of same-sex intimacy, including homosexuality. Influenced by Japan's success in modernization, Westernization was considered to be a cure for the nation's perceived ills. Since then, a number of liberal intellectuals have sought to help China regain its international status through the importation of Western ideas. Consequently, traditional values concerning gender (e.g., the rigidly dualistic conceptions of men and women) (Zheng & Zheng, 2011) along with negative attitudes toward homosexuality, have been gradually adapted by the Chinese (Chou, 2000; Wu, 2003). In addition, the Colloquialism Movement of the early 20th century called for abandoning the intricate written form of ancient Chinese, and instead embracing the colloquial language, thereby leaving the new generation unaware of homosexual activities in ancient China (Chou, 1997; Samshasha, 1997).

It was not until the founding of the People's Republic of China in 1949, however, that homosexual behavior became punishable as a criminal act. During the Cultural Revolution of

the 1960s and 1970s, same-sex behavior was perceived as hooliganism and grounds for prosecution and punishment. The most common punishment entailed imprisonment at a labor reform camp. When the modern gay rights movements began in the United Stated in the 1960s (Adam, Duyvendak, & Krouwel, 1999), the Chinese Communist government used the movement to propagandize and declare the supposed "decline and evil of Western civilization" (Ruan, 1991). Since re-entering the global community in the 1980s, however, individuals in China have gained a measure of personal freedom as well as access to information from the West.

Homosexual activities have become more visible, though the media often distort gay life outside China (Chou, 2000). In the 1980s, authorities still officially declared that there were no homosexuals in China (Wu, 2003), and until 2001 homosexuality was classified as a sexual disorder (Shen, 1993; UNTG, 2002).

The traditional Chinese emphasis on marriage and anti-homosexual attitudes may act to impede the development of a gay or bisexual identity, possibly muting or even eradicating the "self-labeling" process. Despite some progress in the development of a LGB (lesbian, gay, and bisexual) movement in the early 1990s and the adoption of the term *tongzhi* (i.e., lesbian, gay, and bisexual individuals) to encourage a sense of solidarity, homosexuality is still perceived to be "abnormal," "deviant," and "immoral" in mainstream public discourse (Li, 2002; Settle, 2005). Indeed, despite the decriminalization of homosexual behaviors in 1997, the central government still bans films or television programs that contain homosexual scenes (Chinese Central Television, 2004). Anti-homosexual views from the West might also have an adverse influence on attitudes among the Chinese.

In nearby Hong Kong, imbued with nearly a century and a half of British influence, gay and bisexual men exhibit traits similar to their counterparts in the Western world in terms of sexual identity, social homophobia, and internalized homophobia (Chou, 2000). An International Day Against Homophobia parade has been held in Hong Kong annually since 2005. This event advocates for gay rights to the general public and the Legislative Council for the Hong Kong Special Administrative Region, who hold a conception of homosexuality which is analogous to that in the West (http://www.idahohk.org). As a result of their proximity to Hong Kong and the policies of the Chinese central government (Kowk & So, 1995) (*The Hong Kong-Guangdong Link: Partnership in Flux*, 1995), residents of Guangdong Province have been exposed to Hong Kong's hybrid (i.e., semi-British and semi-Chinese) culture and values on sexual identity and sexual orientation. Therefore, it seems safe to postulate that some men among Guangdong Province's *tongzh*i population may desire to self-identify as gay or bisexual. Whether such a desire would influence gay and bisexual men's attitudes toward traditional marriage, however, requires further exploration.

Chinese's attitudes toward heterosexual marriage

Marriage is of paramount importance in Chinese culture. Being a bachelor in China is perceived as abnormal by the general public and causes shame or loss of "face" for the entire family (P. Liu & Chan, 1996; Wu, 2003) within the context of the larger community. This familial duty coupled with the stigma of homosexuality requires gay and bisexual men in China to conceal their sexual needs. Consequently, their homosexual desires and familial obligation to produce heirs remain at odds and unreconciled (Zhou, 2006). For men with homosexual needs (and particularly older men), marrying a woman and continuing the family line remains the only "choice" (Qian, Vermund, & Wang, 2005; K. L. Zhang & Ma, 2002).

As for identity recognition, unlike most gay or bisexual men in Western countries,

Chinese men with homosexual desires may refuse to acknowledge their sexual identity as gay or

bisexual yet still engage in same-sex sexual practices, thus engaging in the behavior without disclosure (Lee, 2000; Manalansa, 1996; Savin-Williams, 1996). Indeed, using in-depth interviews with 11 Chinese non-heterosexual men, Zhou (2006) found that familial duties (e.g., to marry and have a child) are central to these men's identity and sexual practices. Zhou's research also reveals that most *tongzhi* struggle to play the various roles of *tongzhi*, husband, father, and son. Such identity-shifting requires that extra caution be taken in order to conceal one's sexual needs and thus not shame the family. In addition, older participants in Zhou's study felt more negatively and less content about their sexual identity than did younger participants. Young research subjects preferred to use terms such as gay/bisexual/*tongzhi*, whereas older participants tended to use euphemisms such "this kind of people" (Chou, 2000; Zhou, 2006). The research thus has unveiled a generation gap regarding homosexuality.

Chou (2000) and Zhou (2006) also have shown that many *tongzhi* employ a tactic that reconciles familial duties and their own sexual needs. Their research reveals that many gay or bisexual men choose to marry and then divorce an unsuspecting woman -- "fake marriage, genuine divorce" (Chou, 2000) – in order to fulfill their gender obligations *and* satisfy their sexual desires without causing further cognitive dissonance. Yet this approach may not constitute the perfect remedy, given the various adverse consequences of divorce.

Thus, anecdotal evidence suggests that many *tongzhi* are now seeking to enter into sham marriages, regarding such an arrangement as a way to minimize the "side effects" of traditional marriage. In a sham marriage, the man reveals his non-heterosexual needs to a woman (often a lesbian) who agrees to marry him. In such a marriage, the guilt of deception is significantly minimized, and both husband and wife allow the other to continue having same-sex relationships. Because it addresses both personal sexual desires and familial obligations, many

tongzhi consider sham marriages to be a "perfect match." Although no research has yet been conducted on sham marriages in China, it seems safe to postulate that those who embrace sham marriage would demonstrate less negativity toward same-sex behaviors given that the rationale of a sham marriage is in part to continue fulfilling their homosexual desires. While the need to reconcile both familial duties and same-sex sexual desires is acting as an important determinant in marriage decisions among *tongzhi* in China, this shift also provides evidence that the *tongzhi* population has begun placing greater emphasis on self-recognition.

The emergence of the Internet and its impact

For those whose stigmatized identities are concealable, the availability of peer groups for identification is compromised because of the lack of identifiers for similar others and the fear of disclosure (Frable, 1993), especially when the identities are devalued by the mainstream culture. Self-disclosure may also jeopardize their relationships at home, at school, and at work (McKenna & Bargh, 1998), rendering it almost impossible to look around and find their own group.

The Internet has emerged as a harbor for those with stigmatized identities, providing the minorities a platform to gain self-esteem, to increase certainty about themself, and to attain the need to belong (McKenna & Bargh, 1998). The virtual groups have developed on the Internet and offer the opportunities to enjoy the benefits of groups. It has become a popular venue for gay and bisexual men to construct their social and sexual networks in Western countries (Bolding, Davis, Hart, Sherr, & Elford, 2007; Kim, Kent, McFarland, & Klausner, 2001; McFarlane, Bull, & Rietmeijer, 2000). One early study of an online sample of gay and bisexual men in China revealed that only slightly more than a half of the participants identified themselves as homosexuals (Q. Wang & Ross, 2002), but within a decade, the number has jumped up to more than two thirds, corroborating the significance of the Internet in regard to

non-mainstream sexual identities. The substantial growth in the number of people taking part in the cyber world parallels China's rapid development in e-technology in the last decade (D. Zhang et al., 2007). Turkel (1995) in his book argues that the Internet has made available the self-exploration of one's socially disapproved, concealable identity. In the context of Chinese culture, the suppression of discourse pertaining to sexualities in public media and the reluctance to talk about the topic in daily conversations, especially homosexuality and bisexuality, are weakened given the anonymous nature of the Internet. People can now easily obtain more visible signs (e.g. texts, photos, profiles) of others with the same identities and can form likeminded groups.

The original model of social identity by Tajfel (1982) proposes that people are motivated to identify with a social group because of the gain in self-esteem the identification brought. As long as the group is still providing positive distinctiveness to its members, a person will retain the membership. Other scholars suggest that in addition to self-esteem, there are other motivations such as self-knowledge, power, self-efficacy, as well as a sense of belonging (Baumeister & Leary, 1995; Hogg & Abrams, 1990, 1993). Therefore, even though people may be more likely to be exposed to more negative comments and opinions concerning their stigma on the Internet, and even though reading such opinions may be detrimental to their self-esteem, the Internet can promote positive social identity. The Internet has created a safe house that is rarely accessible in real life, and may be able to fulfil the need of an individual with concealable stigmatized identity to feel connected, included, and valued. Hence, virtual groups may be imperative for gay and bisexual men to explore and recognize their sexualities, and reduce the uncertainty of manifesting important aspect of identity.

McKenna and Bargh (1998), in their research exploring the impact of virtual groups, found that participants with concealable marginalized identities were more responsive to feedback than were participants with either mainstream or marginalized-conspicuous identities. In other words, virtual groups were especially important to participants whose stigmatized identities were not obvious (such as being fat or bald) but could be hidden from others, such as one's sexual identity and/or private sexual practices. In one of their studies of people with marginalized sexual identities, McKenna and Bargh found that online newsgroup participation increased self-acceptance, and this relationship was mediated by the importance of the virtual group to the participant. These findings lead McKenna and Bargh to conclude that membership in online virtual groups can provide the same identity support functions as membership in offline groups. If this is true, then the Internet should be a non-negligible source for self-realization and identity expression in everyday life for the LGB individuals.

Nevertheless, some researchers deem the Internet as a potential hazard for gay and bisexual men because it may isolate the individual from real life, make him feel less connected, and increase his risk of exposure to sexually transmitted infections (STIs) and HIV due to the easy accessibility to sex partners (Bolding, Davis, Hart, Sherr, & Elford, 2007; Kim, Kent, McFarland, & Klausner, 2001). As for the potential social isolation brought by the Internet, gay and bisexual men in China are heavily burdened with their familial obligations, as aforementioned, and henceforth are spending a tremendous amount of effort to hide their sexualities so as to alleviate the anxiety of being found out. They are detached from their true selves and being even more isolated from similarly stigmatized others. They avoid situations in which they are likely to be rejected. This is a common strategy to circumvent negative cognitive and affective consequences (Pachankis & Goldfried, 2006). Therefore, many of them live

without social support and may be less likely to be in social situations. As a matter of fact, gay and bisexual men are quite adept at hiding their sexual identities, which leads them to experience increased isolation and distress (Hetrick & Martin, 1987). Online communities for gay and bisexual men, on the other hand, have created a friendly and relatively safe environment where one is able to express thoughts, share experiences, and pose questions about sex and sexuality that would not be possible or welcome in any other Chinese setting. The fear of being caught at public restrooms, parks, and bathhouses is therefore mitigated. Although they often self-present with different personas different from their real life so as to minimize the risk of being "outed" inadvertently, more and more people are willing to expand their social network in the gay and bisexual online communities. Consequently, the Internet, as opposed to some scholar's concerns, is actually creating an efficient way to reduce social isolation given the nature of gay and bisexual individuals' concealable sexual identities (McKenna & Bargh, 1998). In the cyber world, members of the group are protected from the salience of stigma, threat of discovery, and the consequences of discovery, thus diminishing, to a large extent, the associated negative psychological conditions (e.g. anxiety, hostility, shame). Such effects are benevolent for one's identity formation (I. H. Meyer, 1995). In all, the Internet actually addresses the problem of social isolation rather than causing it.

In the field of public health, the Internet is seen as a platform for increased sexual risks among gay and bisexual men. The Internet has become a popular venue for gay and bisexual men to construct their social and sexual networks in Western countries (Bolding et al., 2007; Kim et al., 2001; McFarlane et al., 2000). Researchers have found that HIV risks among gay men are positively associated with the use of Internet for socialization and sexual partner recruitment (Chiasson et al., 2007). Rosser et al. (2009) find that online gay men are

significantly more likely to practice unprotected sex than their offline counterparts. Similar findings were recently shown in a large Internet sample of gay and bisexual men from Asia (Lim, Guadamuz, Wei, Chan, & Koe, 2012). Other researchers also reveal that gay men who recruit sexual partners both online and offline have a significantly greater number of sexual partners than those who recruit only offline partners (Jenness et al., 2010). Sex work is made highly accessible on the Internet. Even though some forms of online sex work are considered safe (e.g. sex shows broadcasted via webcam), the Internet still plays a central role in the marketing of male-to-male prostitution, which is far less accessible and riskier in the offline world. Yet such research focuses merely on the behavioral dimension and overlooks the salience of other dimensions of equivalent importance. Granted, the increased sexual risks are problematic, but the Internet also provides gay and bisexual men a platform to release their long suppressed sexual desires and thereby reducing the associated anxiety and uncertainty.

Nonetheless, Internet as a source of information about sexuality is under-researched (Daneback, Mansson, Ross, & Markham, 2011). Little do we know about what information and knowledge gay and bisexual men look for on the Internet. Baams et al. (2011) suggest an age cohort effect in utilization of the Internet among gay and bisexual. In their study, they discovered that younger gay and bisexual participants have the tendency to receive more online social support while the older participants tend to use the Internet for sexual purposes. However, a recent study in Sweden finds that men and women of all ages used the Internet to seek information about sexualities, indicating the persistence of the need for sexual education even among LGB adults.

Research overview

As evidenced by the review of the literature, there is a need for more research on the interesting and dynamic nature of homosexual identity in China, and a need for much more research on how the Internet relates to this identity. The purpose of my research is to explore the relationship between homosexual identity and the Internet, using an online sample from Southern China. The goals of this research are (1) to document the nature of participants' homosexual identity (including their history of sexual experiences, their level of self-acceptance, and their fears of disclosure); (2) to describe their Internet use and attitudes (including the functions they most frequently use, and how much they value the anonymity provided by the Internet); and (3) to explore the relationships between these two sets of factors.

Despite the exploratory nature of this research, it is possible to formulate a number of hypotheses. The first four hypotheses have to do with participants' level of self-acceptance. The next five hypotheses have to do with participants' comfort with disclosure. The next three have to do with the extent to which participants have "come out" to others. The final three hypotheses have to do with the extent to which participants value the anonymity of the Internet.

- H1: Coming from an urban rather than rural background will be associated with higher levels
 of self-acceptance.
- H2: Higher levels of family acceptance and support will be associated with higher levels of self-acceptance.
- H3: Lower frequency of negative emotions/feelings caused by sexual orientation will be associated with higher levels of self-acceptance.
- H4: Higher levels of Internet use to explore sexuality will be associated with higher levels of self-acceptance.

- H5: Higher levels of self-acceptance will be associated with higher comfort with disclosure.
- H6: Coming from an urban background will be associated with higher levels of comfort with disclosure.
- H7: Higher levels of family acceptance and support will be associated with higher comfort with disclosure.
- H8: Higher frequency of negative emotions/feelings caused by sexual orientation will be associated with lower comfort with disclosure.
- H9: Higher levels of Internet use to explore sexuality will be associated with higher comfort with disclosure.
- H10: Higher levels of family acceptance and support will be associated with higher levels of "coming out" to others.
- H11: Higher levels of self-acceptance will be associated with higher levels of "coming out" to others.
- H12: Higher levels of Internet use to explore sexuality will be associated with higher levels of "coming out" to others.
- H13: Lower levels of self-acceptance will be associated with higher value for the anonymous nature of the Internet.
- H14: Lower levels of comfort with disclosure will be associated with higher value for the anonymous nature of the Internet.
- H15: Lower levels of "coming out" to others will be associated with higher value for the anonymous nature of the Internet.

CHAPTER II

METHOD

Data

The data used in this research were collected in a mid-term mega-survey that is part of a Ford Foundation project, *Providing sexuality education capabilities and techniques for stake-holders of LGBT youths in China basing on new media*, in Guangdong, China, administered by GZTZ.ORG, a community-based organization dedicated to the local LGBT community development and empowerment.

The project duration is two years from March 2012 to February 2014. This particular mid-term survey is an Internet-based online self-administered survey that consists of three subsurveys, the objective of which is to obtain a comprehensive and systematic quantitative assessment and evaluation of sex education and sexuality among LGBT individuals. The survey, implemented between February and March in 2013, yielded a final sample size of 2,007 participants. Note that only registered members of the website can take part in the surveys due to the concern that including non-members could cause overrepresentation of the online sample because of multiple submissions (details in the following section). The themes of the subsurveys are sexual behavior, sex education, and Internet and sexual identity. This research uses the data of the survey of Internet and sexual identity.

This survey attempts to evaluate participants' sexual identity level (i.e. how comfortable they are with their sexual identity), and willingness to disclose their sexual identity, and to explore how they use the Internet for contents relevant to sexuality. All Internet users were eligible for this survey. There are 503 participants in the final sample.

Background of the research site

GZTZ.ORG is an LGBT-oriented website founded in 1998 in Guangzhou, Guangdong Province with populations of 12,700,800 and 104,303,132, respectively. The website was later transformed into a community-based organization that is known for its expertise in developing Internet-based technologies to merit LGBT individuals and its dedication to constructing online LGBT-community. For more than 14 years, it has grown to become one of the largest online communities for LGBT individuals and heterosexual allies in China. It has a substantial amount of longstanding members as well as newcomers. In 2009, there were 3,413,665 unique visitors to the website. Therefore we believe that the sample can capture the characteristics of gay men who use the Internet in Guangdong, China.

GZTZ.ORG is exclusively open to registered members. The registration requires a username, a password, a current resident city, and an agreement with the regulations of the website, which particularly requires the users to be at least 16 years old and prohibits duplicates (one person cannot register twice and the system detects duplicates on a daily basis). Also, a user can create more than one avatar under each account, therefore reducing the inclination of the users to create an alternative account. This website has developed an online survey system that allows intricate questionnaire designs. The staff and facilities of this organization have been trained for scientific research through collaborations with local, provincial, and national Center for Decease Control and Prevention (CDC), and international organizations (e.g. Global Funds). In 2007, one researcher at Tsinghua University conducted a cross-sectional baseline survey that took at least 30 minutes to complete, with 163 items regarding intimate sexual behaviors, sex network, sex service, substance abuse, and anti-HIV serostatus. This survey was put online for 2 months and had 6,814 completed questionnaires. Although there exists a potential sampling

frame for the website (the registered member list), the list, however, is not available to any researchers for the concern of confidentiality. Besides, not all registered members are active users (i.e. using the website at least once a month). The organization also has a drop-in center that holds regular LGBT-theme events/activities weekly. In 2010, there were 6,016 visitors (person-time), averaging almost 116 visitors per week.

Procedure

GZTZ.ORG used various approaches to introduce the research. During the recruitment, registered members received system notification of the surveys. In addition, a banner advertising the survey was posted on the front page and in the chat rooms of the website that read: "Let's know ourselves better." By clicking the banner, members were directed to the survey page that contained the introduction of the project and the mega-survey, a cover letter, and contact information. Each member was only allowed to complete one of the three sub-surveys. All participants were provided an electronic informed consent before participating in any of the sub-surveys. The title of the Internet and sexual identity survey was "Cyber life and me." Virtual incentives (analogous to virtual currency in video games) were offered to participants in exchange for their completion of the survey. The following sections are to describe the participants and measures.

Participants

The participants included in the analysis are gay, single men. Bisexual and married men were excluded from analysis because their social situation and sexual identities are more ambiguous and complicated. First, for bisexual men, psychological adjustments are not associated with their levels of homosexual identity development (Malcolm, 2008). In other words, bisexual identified men do not need to attain a high level of self-acceptance so as to

alleviate the stress and anxiety caused by his sexual identity. In Malcolm's (2008) research, bisexual male participants are at the first of the four stages of Cass' (1979) model of Homosexual Identity Formation. These four stages are "identity confusion," "identity comparison," "identity tolerance," and "identity acceptance." Results show that their psychological adjustments are independent of the stages they are at, meaning that bisexual participants with high levels of internalized homophobia are able to achieve successful psychological adjustments. Using the same model, researchers also find that only one quarter of homosexual male participants, not surprisingly, are in the most developed stage, "identity synthesis," in which individuals decrease the level of shame toward themselves and anger toward the society (i.e. lower level of internalized homophobia). Results reveal that the homosexual identity development is significantly associated with psychological adjustments among homosexual participants.

Also, in the Chinese context, bisexual men are facing different social problems because within the context of traditional values surrounding family, "getting back to normal" by marrying a woman is a means to overcoming "bad habits." Since the stigma stems from perceived familial obligations, once these obligations are fulfilled, then internalized homophobia is reduced. In the West, non-heterosexual individuals are apt to anticipate rejection as a result of their stigmatized identity (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Meyer & Dean, 1998). In China, however, anticipation of such rejection is greatly reduced by virtue of the protection afforded by entering into a traditional marriage. As a result, the married individuals would experience lower levels of perceived inferiority than their Western counterparts. At any rate, the low frequency of bisexual and married participants in the research sample would have made it difficult to conduct cross group analysis due to the lack of statistical power. Hence, in this study, I excluded participants who self-identified as bisexual and/or married.

Measures of background and identity

Socio-demographic characteristics. Participants were queried with respect to their gender, age, sexual orientation, education, occupation, number of siblings, type of Hukou (i.e. a record of residency of origin), and current residency. Urban Hukou is coded as 0, and rural Hukou is coded as 1. Only children (i.e. no siblings) are coded as 1. Responses of occupation are coded as 0 = Unemployed/Student/Retired, $1 = Part-time\ employee/Full-time\ employee$. Current residency is coded as 1 = Guangzhou; other responses are coded as 0 = Unemployed.

Exploration of self-identity. One item asked whether participants have had sexual contacts before. Responses are coded as 0 = No, never, 1 = Yes, only with the opposite sex, 2 = Yes, with both sexes, and 3 = Yes, only with the same sex. A subsequent item was presented to those who self-reported "yes" (i.e. 1, 2, and 3), asking the sex of the person with whom they had their first sexual contact. Another item inquired whether participants' family had ever talked about homosexuality/bisexuality before. Responses are 0 = Never mentioned, 1 = Yes, but they sounded disgusted and not accepting, 2 = Yes, and they did not seem to care, and 3 = Yes, and they sounded supporting and accepting. Participants were also queried whether they had disclosed their sexual orientation, responses of which being 1 = Completely closeted, 2 = Yes, only to some people, and 3 = Yes, to everyone. Other variables include age at which the participants first realized their sexual orientation, age at which they confirmed their sexual orientation, and whether homosexuality is classified as a mental illness in China according to participants' knowledge.

For sexual identity, the survey adapted the scale with 23 items developed for and tested on homosexual men by Nungessor (1983). These items were grouped into three subscales:

Attitudes toward pro-homosexuality policies, self-acceptance, and comfort with self-disclosure

of sexual identity. Responses were measured with a 4-point Likert scale ranging from 1 = *strongly disagree* to 4 = *strongly agree* without a neutral response. The overall Cronbach's alpha is .90.

Attitudes toward pro-homosexuality policies. There are two items in this subscale, which are "homosexuals should be allowed to have or adopt children if they want to" and "marriage between two homosexuals should be legalized." High scores indicate positive attitudes toward pro-homosexuality policies.

Self-acceptance. This subscale with 9 items assesses how well the participants accept their sexual identity. Sample items are "I am glad to be (lesbian/gay/bisexual)," "Whenever I think a lot about being (lesbian/gay/bisexual), I feel sad or depressed" (reverse coded), and "I would not give up my (homosexuality/bisexuality) even if I could." Higher scores indicate more positive sexual identity. (Cronbach's alpha = .83)

Comfort with self-disclosure of sexual identity. A total of 13 items are included in this subscale, with low scores indicating participants' proclivities to hide their sexual identities to others. Sample items include, "When I think about coming out to a straight friend, I am afraid they will pay more attention to my body movements and voice than to me, the person" (reverse scored) and "I would not mind if my neighbors knew that I am (lesbian/gay/bisexual)." Higher scores indicate greater comfort in revealing one's sexual identity to others. (Cronbach's alpha = .91)

Measures of Internet use

Basic characteristics of Internet use. Participants were asked how often they used the Internet to obtain information about sexuality, with a response scale ranging from 1 = Less than once a year to 5 = At least once a day. Other questions asked the age at which participants used

the Internet for information about sexuality for the first time, the estimated hours per week spent on the Internet for personal use in the last 6 months, the location in which they use the Internet for personal use, and the proportion of total Internet time spent on mobile devices.

Types of most frequented websites and contents. A first set of questions asked participants to rate their browsing frequency of 9 types of websites: dating website, chat rooms, instant messaging tools, online forum, social networking sites, news and information, websites that offer help and support, smartphone application, and pornography websites. A second set of questions asked participants to rate their use of 17 types of contents (e.g. "looking for friends" or "looking for a relationship"). Both sets of questions used a 6-point response scale: 0%, 20%, 40%, 60%, 80%, and 100%. On this response scale, 0% indicated that the participant had never gone to a certain type of website or consumed a certain content, and 100% indicated that the

Table 1. Categorization of contents of the Internet

Health related information	Sexual health STDs/HIV testing and treatment information To seek help concerning sexual health
Social connection	Making new gay friends Looking for a relationship Observing others' lifestyle Compare yourself with others To see what friends are up to LGBT-related literature LGBT-themed motion pictures/movies To participate in LGBT-themed activities
Social support	To seek help concerning personal emotions To seek help concerning coming out
Sexual needs	Looking for casual sex partners LGBT-themed pornography
News	LGBT news To know about LGBT-themed activities

participant always went to this particular type of website or browsed on such contents. Values were later recoded as 1 = 0%, 2 = 20%, 3 = 40%, and so on. The content questions were categorized into four groups at face value as shown in Table 1. Responses were averaged within categories.

Reasons to use the Internet for information about sexuality. A set of 11 statements about the importance of the Internet were presented, and participants responded using a 4-point Likert scale, ranging from 1 = Strongly disagree to 4 = Strongly agree. Sample items include "It is difficult to talk about it (sexuality) in real life," "The Internet can guarantee that my real identity won't be disclosed," and "The Internet can meet more of my needs than in real life." Two subscales were created as shown in Table 2: the importance of perceived anonymity and the importance of content quality.

Table 2. Components of the sub-scales of importance of perceived anonymity and importance of content quality

Importance of perceived anonymity	It is difficult to talk about it in real life There are no people to talk about it in real life The Internet can guarantee that my real identity won't be disclosed				
	I can obtain information anonymously I can be my true self on the Internet and don't need to lie about my				
	sexuality				
Importance of content	The Internet is the only way I can obtain such information				
quality	I can find more information on the Internet				
	The information on the Internet is more accurate				
	It is easy to obtain pertinent information on the Internet				
	The Internet can mitigate my curiosity more efficiently				
	The Internet can meet more needs of mine than in real life				

CHAPTER III

RESULTS

Descriptive statistics

As can be seen in Table 3, the mean of age of the participants is 29.23 years (N = 334, SD = 6.1), with a minimum age of 17 years and a maximum of 49 years, indicating that the sample captures a wide range of participants from different generations. Of all the respondents, none received an educational attainment below secondary school. One fifth (21.9%, N = 73) received a secondary school diploma or equivalent.

The majority of the participants (68.6%, N = 229) have a Bachelor's degree or equivalent. Forty-two (12.5%) respondents finished graduate school. The results show a relatively higher educational attainment than the offline samples (D. Zhang et al., 2007). A large proportion of the participants (76.6%, N = 256) are full-time employees. Students come in the second place, making up 9.6% (N = 32) of the total sample size, followed by unemployed participants (8.7%, N = 29) and part-time employees (4.5%, N = 15). There are two (0.6%) retired participants. Approximately two thirds of the participants (63.5%, N = 212) hold an Urban Hukou¹. Most participants (95.8%, N = 320) are currently living in Guangdong Province, the most developed province in China, sharing 10.99% of the total national gross domestic product (GDP) out of 31 provinces and municipalities in Mainland China, excluding Hong Kong and Macau. Almost 8 out of 10 participants (77.5%, N = 259) are living in the provincial capital Guangzhou. A total of 90 (26.9%) participants are the only children in their family; others (73.1%, N = 244) have at least one sibling. More than half of the sample (59.6%, N = 199) is no longer living with parents.

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¹ Hukou is a record of residential origins in China. There are two types of Hukou: urban and rural. Urban Hukou holders are advantageous in education, business, job hunting, social welfare (e.g. health care), and investments in various fields (e.g. real estate).

Table 3. Participants' demographic information

Variable	N	Mean	S.D.	Min.	Max.
Age	334	29.23	6.1	17	49
Variable	N	%			
Education					
Secondary school diploma	73	21.9			
College/Bachelor's degree	229	68.6			
Graduate or above	42	12.5			
Occupation					
Student	32	9.6			
Full-time employee	256	76.6			
Part-time employee	15	4.5			
Unemployed	29	8.7			
Retired	2	0.6			
Type of Hukou					
Urban	212	63.5			
Rural	122	36.5			
Current residency					
Guangzhou	259	77.5			
Foshan	8	2.4			
Shenzhen	10	3.0			
Hong Kong	3	0.9			
Other regions in Guangdong Province	40	12.0			
Outside Guangdong Province	14	4.2			
Living with parents					
No	199	59.6			
Yes	135	40.4			
Only child					
No	244	73.1			
Yes	90	26.9			

Note. N varies due to missing data.

In Table 4, we can see the mean ages at which the participants recognized and confirmed their sexual orientations are 16.3 years (N = 327, SD = 4.1) and 19.1 years (N = 329, SD = 4.3), respectively. This shows that, on average, most participants experienced a salient period of self-identity exploration before their twenties, roughly during the early years of college time. A substantial amount of the participants (70.7%, N = 236) self-reported never disclosing their

Table 4. Participants' sexual characteristics

Variable	N	Mean	S.D.	Min.	Max.
Age of recognition	327	16.3	4.1	3	30
Age of confirmation	329	19.1	4.3	3	36
Variable	N	%			
Sexual contact before					
Yes, only with the same sex	269	83.3			
Yes, with both sexes	53	16.4			
Yes, only with the opposite sex	11	00.3			
Family discussion					
Never	169	50.6			
Yes, they seemed disgusted, not accepting	123	36.8			
Yes, they didn't seem to care	34	10.2			
Yes, they seemed supportive, accepting	8	02.4			
Disclosure					
Completely closeted	236	70.7			
Out to some people	80	24.0			
Out to everyone	18	05.4			
If homosexuality is a mental illness in China					
Don't know	51	15.3			
Yes	93	27.8			
No	190	56.9			

Note. N varies due to missing data.

sexual orientation to others. Almost a quarter of participants (24.0%, N = 80) are out to some selective people (e.g. close friends, family members). Only 18 participants (5.4%) self-reported complete disclosure of their sexual orientation. This finding corroborates the proposition that the Internet has become a safe place for people with concealable identities as mentioned in the introduction. Half of the participants (50.6%, N = 169) reported that their families have never talked about homosexuality at home. Among the participants whose families have ever discussed homosexuality, many of them (36.8%, N = 123) self-reported that the tone of their family members indicated disgust and lack of acceptance. Some participants (10.2%, N = 34) self-reported that their family did not seem to care about the topic, and only 8 participants self-reported a supportive and accepting tone from their family.

Only one participant self-reported that he had never had sex before. Of those who have, more than 80% (N = 269) only have had sex with men. When asked whether homosexuality is deemed as a mental illness in China, almost half of the participants were unable to choose the correct response, No, with 51 participants (15.3%) choosing Don't know and 93 Yes (27.8%). The result is unexpected since homosexuality was declassified as a sexual disorder more than 10 years ago yet most participants are still unaware of this fact. Therefore being afraid of being labeled as "mentally disordered" may potentially account for the low disclosure rate in this group of respondents.

Table 5 is a summary of participants' level of self-acceptance and comfort with disclosure. As shown in the table, the mean score per item of self-acceptance among the participants is 2.72 (N = 334, S.D. = .66), and the mean score of comfort with disclosure is 2.08 (N = 334, S.D. = .71). *T*-tests using the midpoint = 2.5 of the Likert scale yield the results that participants' level of self-acceptance is greater than the midpoint (t = 6.16, dt = 333, p < .01),

and their level of comfort with disclosure is less than the midpoint (t = -10.86, df = 333, p < .01). Results indicate that even though the mean value per item of self-acceptance among the participants is statistically greater than the midpoint and trending toward positive attitudes toward their sexual identity, the effect size is still less than satisfactory. In terms of comfort with disclosure, participants are still feeling uncomfortable to come out to others as shown in the result.

Table 5. Participants' level of self-acceptance and comfort with disclosure

Variable	N	Mean per item	S.D.	\mathbf{t}^a	df
Self-acceptance	334	2.72	.66	6.16**	333
Comfort with disclosure	334	2.08	.71	-10.86**	333

Note. a t-tests compared mean value with the scale midpoint value of 2.5.

As for Internet use, Table 6 shows that the mean age at which participants first used the Internet to obtain information about sexuality is 20.1 years (N = 333, SD = 4.5), making an average of roughly 9 years of using the Internet for sexuality related information among the sample. The estimated hours spent on the Internet for personal use per week among participants, on arithmetic average, is 27.0 hours per week (N = 476, SD = 23.7), which illustrates that the respondents spend an average of almost 4 hours per day on the Internet for personal purposes, showing a high prevalence of Internet use among the sample. This finding is anticipated given the nature of online samples. The average time spent on mobile devices for Internet use makes up approximately one third (26.9%) of total Internet use among the participants. The significance of the result is unknown due to the lack of reference data. A majority of participants (78.7%, N = 263) use the Internet for personal use at home, from which it is safe to postulate that most participants have a rather "safe" environment when surfing on the Internet for information

^{**} *p* < 0.01.

Table 6. Participants' Internet use

Variable	N	Mean	S.D.	Min.	Max.
Age when first used Internet to obtain info about sexuality	333	20.10	4.5	10	35
Est. hrs/wk spent on Internet for personal use	330	28.90	24.9	1	140
Internet sites browsing frequencies				1	6
Dating website	334	3.01	1.27		
Chat rooms	334	2.69	1.42		
Instant messaging	334	3.86	1.52		
Online forum	334	2.49	1.35		
Social networking	334	2.67	1.45		
News and information	334	3.20	1.43		
Help and support	334	1.99	1.18		
Smartphone app	334	2.34	1.50		
Pornography	334	2.79	1.43		
Internet content browsing frequencies				1	6
Health information	334	2.88	1.26		
Social connection	334	2.91	1.00		
Social support	334	2.25	1.32		
Sexual needs	334	2.95	1.27		
News	334	2.79	1.21		
Variable	N	%			
Location to use Internet for personal use					
At home	263	78.7			
At work	25	7.5			
At Internet cafes	19	5.7			
At school	17	5.1			
In other places	10	3.0			
How often does R look for info about sexuality online					
At least once a day	4	1.2			
At least once a week	11	3.3			
At least once a month	45	13.5			
At least once a year	149	44.6			
Less than once a year	125	37.4			

Note. N varies due to missing data.

pertaining to sexuality. However, 82% of the participants self-report that they look for information about sexuality online only at least once a year or less frequently.

Using the scale's midpoint value of 3.5 as a reference, it is evident that there is only one site (i.e. instant messaging tools) that exceeds medium use. Other sites are all below the midpoint value. In other words, most values lie within the *never* to *sometimes* range. In spite the heavy Internet use among the participants, they are not frequenting dating websites, online forum, social networking websites, or viewing pornography as much as might be expected. Even though theories suggest that the Internet may be important for sexual identity in China, these participants are apparently doing what heterosexual men are doing, meaning that they do not frequent sites that are reckoned to be beneficial to their identity formation. The results of Internet content consumption items corroborate these findings as well. All the frequencies are less than the midpoint value, which means that most participants, on average, only browse such contents for sexuality between *occasionally* and *sometimes*.

The most frequented Internet site is instant messaging tools with a mean of 3.86, followed by news and information sites (mean = 3.20) and dating websites (mean = 3.01), indicating that participants spent most of their time on online communication, finding out what is happening around them, and expanding their social circle. Given that the sample was captured on the Internet, this result is not surprising. Even though chat rooms can provide similar functions, individuals usually know little about the person they are chatting with due to the lack of profile information and pictures, whereas instant messaging tools contain more descriptions of the traits of the user, making it easier for other individuals to determine whether they are compatible or not. Also, instant messaging tools are more advantageous in constructing networks because they enable their users to set a list of friends in whom they are interested,

while chat rooms are less functional and users are limited to chatting to those who are online. In addition to their social function, instant messaging tools can better protect users' privacy for they can block whoever they are not willing to communicate with or spams (i.e. they can prevent certain users from sending them messages and viewing their profiles). Besides, chat rooms are sometimes deemed as obsolete and associated with low social status because their main purposes now are focused on finding sexual partners (Rhodes, 2004).

The least frequented Internet site is websites that offer help and support (mean = 1.99). This result is somewhat unanticipated given that anonymity is a salient trait of the Internet and individuals are usually ashamed to seek assistance and support in real life. Hence my postulation is that individuals are prone to attain help and/or support through other means, such as instant messaging tools, which means that they would rather turn to their friends than to professionals. Seeking professional help can be seen as a personal weakness. Peer support, on the other hand, is more accessible and more connected to participants' personal experience, while experts might be conceived as distant from the gay community.

In terms of the contents that the participants browse on the Internet, the differences in frequencies are almost indiscernible. Although the results show that contents related to sexual need is the most frequented content (mean = 2.95), other categories are also approaching 3 on the scale except social support.

Table 7 summarizes participants' reasons for using the Internet for information about sexuality. The mean score per item of the importance of perceived anonymity is 3.26 (N = 334, S.D. = .59) and the mean score of the importance of perceived quality is 3.25 (N = 334, S.D. = .50). Simple *t*-tests reveal that the mean values per item of both variables (i.e. perceived

importance of anonymity and perceive importance of content quality) are greater than the scale's midpoint value of 2.5 (t = 23.63, df = 333, p < .01 and t = 27.58, df = 333, p < .01, respectively).

Table 7. Participants' reasons for using the Internet for information about sexuality

Variable	N	Mean per item	S.D.	\mathbf{t}^a	df
Anonymity	334	3.26	.59	23.63**	333
Quality	334	3.25	.50	27.58**	333

Note. at-tests compared mean value with the scale midpoint value of 2.5.

Results indicate that participants tend to perceive high importance of anonymity and content quality given the large effect size.

Correlational analyses

Due to the ordinal and non-linear nature of the variables of interest in the correlational analyses, correlations in Table 8, 9, and 10 are computed based on the Spearman method. Table 8 is a Spearman zero-order correlation matrix of self-acceptance, comfort with disclosure, and demographic variables (i.e. age, education, occupation, type of Hukou, current residency,

Table 8. Correlations between self-acceptance, comfort with disclosure, and demographic variables

Variable	1	2	3	4	5	6	7	8
1. Acceptance								
2. Disclosure	.42**							
3. Age	06	.03						
4. Education	.05	02	.04					
5. Occupation	03	.08	.31**	.33**				
6. Type of Hukou	13*	.00	23**	20**	.03			
7. Current residency	.06	.01	.27**	05	.21**	06		
8. Only child	.08	.01	11 [†]	.07	01	28**	09 [†]	
9. Living with parents	.08	.04	13*	08	03	07	.07	.16**

Note: † p < 0.1, * p < 0.05, ** p < 0.01.

^{**} *p* < 0.01.

whether participant is the only child, whether participant is living with their parents). Result reveals a moderately strong correlation between self-acceptance and comfort with disclosure ($r_s = .42, p < .01$). The only demographic variable that is significantly correlated with self-acceptance is participants' type of Hukou ($r_s = -.13, p < .05$), indicating that participants holding a rural Hukou are more likely to have a lower level of self-acceptance than their urban counterparts. No significant correlation is found, however, between Hukou or any other demographic variable or comfort with disclosure.

In Table 9 we can see the Spearman correlations between self-acceptance, comfort with disclosure, and other sexual characteristics of the participants. Self-acceptance is correlated with age of confirmation ($r_s = -.12$, p < .05), whether participants have disclosed their sexual orientation ($r_s = .20$, p < .01), whether participants have had sexual contacts before ($r_s = -.16$, p < .01), whether participants have had negative emotions/feelings caused by their sexual orientation before ($r_s = -.04$, p < .01), and whether participants' family has ever discussed the topic before ($r_s = .11$, p < .05). Comfort with disclosure is significantly correlated with whether participants have disclosed their sexual orientation ($r_s = .37$, p < .01), whether participants have had negative emotions/feelings caused by their sexual orientation before ($r_s = .19$, p < .01), and whether participants' family has ever discussed the topic before ($r_s = .15$, p < .01).

The results suggest that the level of self-acceptance is associated with participants' disclosure status, sexual contacts, past negative emotions/feelings because of sexual orientation, and family discussion. The causal direction cannot be determined in correlational analysis, but it is reasonable to postulate that high self-acceptance plays an important part in participants' psychological status. Comfort with disclosure, on the other hand, has a more intuitive causal

direction at face value. Whether participants are out or not, have negative emotions/feelings associated with their identity, and have had family discussions about their sexuality are indicators of participants' level of comfort with disclosure. It is safe to argue that comfort with disclosure is the result of the psychological variables, meaning that, for instance, the more negative emotions the participants have experienced in the past, the lower their comfort level can be. One of the other interesting correlations is that of participants' disclosure status with age of recognition ($r_s = -.17$, p < .01) and age of confirmation ($r_s = -.24$, p < .01), showing that these particular milestones (i.e. recognition and confirmation) are significantly associated with respondents' coming out status. Since coming out is the psychological end product (Rosario et al., 2006), one may contend that the earlier the milestones happen, the more likely the participants are willing to disclose their sexual orientation to others. Also, respondents' disclosure status is highly correlated with family discussion. Given the Chinese context, I surmise that the more perceived friendliness from family members, the more likely participants will be to come out.

Table 9. Correlations between self-acceptance, comfort with disclosure, and sexual characteristics

Variable	1	2	3	4	5	6	7
1. Acceptance							
2. Disclosure	.42**						
3. Age of recognition	08	01					
4. Age of confirmation	12*	08	.73**				
5. Out or not	.20**	.37**	17**	24**			
6. Sexual contacts	16**	07	.11 [†]	.15**	12*		
7. Negative emotions	40**	19**	05	05	02	02	
8. Family discussion	.11*	.15**	10 [†]	10 [†]	.30**	11*	.02

Note. † p < 0.1, * p < 0.05, ** p < 0.01.

Table 10 provides the Spearman zero-order correlations between self-acceptance, disclosure, and the frequencies of the Internet sites that the participants go to. Results show that the websites participants visit are largely uncorrelated with their levels of self-acceptance or comfort with disclosure. The only correlation that reaches a conventional level of significance indicates that the higher a participant's self-acceptance, the less the frequency of visiting sites that offer help and support ($r_s = -.12$, p < .05).

Table 10. Correlations between self-acceptance, comfort with disclosure, and Internet sites browsing frequencies

Variable	1	2	3	4	5	6	7	8	9	10
1. Acceptance										
2. Disclosure	.42**									
3. Dating website	.02	07								
4. Chat rooms	11 [†]	10^{\dagger}	.41**							
5. Instant messaging	00	13*	.20**	.17**						
6. Online forum	03	.01	.28**	.27**	.28**					
7. Social networking	$.10^{\dagger}$.02	.26**	$.10^{\dagger}$.27**	.41**				
8. News and info	02	08	.17**	.15**	.20**	.25**	.18**			
9. Help and support	12*	06	.22**	.27**	.06	.39**	.30**	.28**		
10. Smartphone app	02	05	.25**	.18**	.25**	.18**	.28**	.07	.26**	
11. Pornography	.01	01	.23**	.26**	.20**	.30**	.27**	.23**	.29**	.31**

Note. $\dagger p < 0.1$, * p < 0.05, ** p < 0.01.

Table 11 shows zero-order correlations regarding Internet content, using the Spearman method. As can be seen in the table, neither self-acceptance nor comfort with disclosure correlates significantly with any of the Internet content variables.

Table 11. Correlations between self-acceptance, comfort with disclosure, and Internet content browsing frequencies

Variable	1	2	3	4	5	6
1. Acceptance						
2. Disclosure	.42**					
3. Health information	.05	05				
4. Social connection	.02	03	.55**			
5. Social support	02	03	.57**	.62**		
6. Sexual needs	01	08	.43**	.55**	.32**	
7. News	03	04	.51**	.69**	.55**	.46**

Note. † p < 0.1, * p < 0.05, ** p < 0.01.

Mediation effect

Table 12 presents the Pearson zero-order correlations among self-acceptance, comfort with disclosure, importance of perceived anonymity of the Internet, and importance of content quality of the Internet. Results reveal significant inter-correlations among all the variables at alpha = .01 level. Baron and Kenny's steps (1986) were used to determine whether there exist

Table 12. Correlations between self-acceptance, comfort with disclosure, and reasons to use the Internet

Variable	1	2	3
1. Acceptance			
2. Disclosure	.44**		
3. Content quality	17**	42**	
4. Importance of anonymity	22**	48**	.45**

Note. ** p < 0.01.

any mediation effects with self-acceptance being the independent variable and comfort with disclosure being the mediator. Table 13 summarizes the results of the three steps for each test.

In Test 1, the overall regression models in three steps are all significant at alpha = .01 level. In step 3, when comfort with disclosure is added as a predictor, the magnitude of the standardized beta coefficient of self-acceptance plummets to close to zero, giving evidence of a strong

Table 13. Step by step standardized linear regressions test for mediation effects

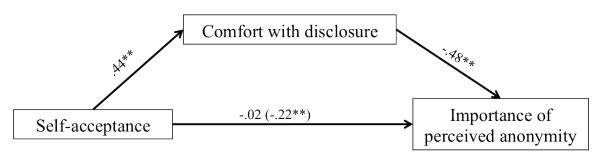
Dependent variable	Independent variable	Standardized coefficient	t	F	p	R ²
Test 1: Anonymit	y					
Step 1						
Anonymity				17.35**		.05
	Acceptance	22	-4.12		<.001	
Step 2						
Disclosure				77.89**		.19
	Acceptance	.44	8.83		<.001	
Step 3						
Anonymity				49.25**		.23
	Acceptance	02	33		0.74	
	Disclosure	47	-8.78		<.001	
Test 2: Quality						
Step 1						
Quality				9.76**		.03
	Acceptance	17	-3.12		0.002	
Step 2						
Disclosure				77.89**		.19
	Acceptance	.44	8.83		<.001	
Step 3						
Quality				16.07**		.09
	Acceptance	05	86		0.39	
	Disclosure	27	-4.67		<.001	
Note ** n < 01						

Note. ** p < .01

mediation effect. In other words, comfort with disclosure helps explain why self-acceptance is associated with lower importance of perceived anonymity. Test 2 analyzes whether comfort with

disclosure can help explain why low levels of self-acceptance are associated with higher importance of content quality. Results seem to show a mediation pattern, but should be interpreted with caution because the R-square is lower in Step 3 than in Step 2. Other variables were added to this model but no significant path was found.

Figure 1. Mediation effect among self-acceptance, comfort with disclosure and importance of perceived anonymity.



Note. ** p < .01

CHAPTER IV

DISCUSSION

The goal of this research was to explore the association between single, gay men's sexual identities and their Internet use. To summarize, all hypotheses were confirmed by the results except the hypotheses about Internet use (i.e. H4, H9, and H12).

In the initial analysis, H5 is supported, meaning that self-acceptance and comfort with disclosure are positively correlated, which is not surprising according to the literature. The only demographic variable that is significantly associated with self-acceptance among the sample is participants' type of Hukou, which supports H1 and H6. This can be accounted for by the many advantages and benefits that participants who come from an urban Hukou enjoy. These participants have more access to new technologies and fine education, and, therefore, are exposed to more information regarding sexualities (Daneback et al., 2011). Such exposure plays an auxiliary role in gay men's self-exploration (Baams et al., 2011; Daneback et al., 2011; McKenna & Bargh, 1998).

As for participants' psychological variables, the strongest correlations were found between self-acceptance, comfort with disclosure, and past emotions or feelings caused by sexual identity, which supports H3 and H8, and between comfort with disclosure and participants' coming out status, supporting H11. The fact that past negative emotions or feelings were associated with lower self-acceptance can be explained in two ways. On one hand, negative life events concerning sexual identity can impede the development of sexual identity formation (Rosario et al., 2011; Rosario et al., 2006). On the other hand, as Rosario, et al. (2006) propose in their research on LGBT identity formation among youths, when respondents attempt to invoke the memories of their past experience retrospectively, they tend to modify the psychological reactions toward the events based on their current levels of self-acceptance. In other words.

participants with high levels of self-acceptance are less inclined to remember or perceive their past negative emotions or feelings associated with their sexual identity than those with low levels of self-acceptance. The strong correlation between comfort with disclosure and coming out status is obvious and anticipated, because disclosing one's sexual identity is the outcome of their higher comfort level. An interesting correlation between participants' disclosure status and family discussion is understandable given the Chinese cultural setting. As aforementioned, family plays an upmost important role in China. Results provide support to H2, H7, and H10, that higher family acceptance of homosexuality is positively correlated with self-acceptance and comfort with disclosure, respectively, and inversely associated with "closeting" (i.e. higher family acceptance is associated with less "closeting"). The attempt to retain intact the family "face," namely the family reputation, leads gay men to conceal their sexual orientation from their family members. Consequently, if they perceive friendly attitudes toward homosexuality among their family members, such burden is mitigated and the stress to hide their sexual identity is alleviated, thus enhancing the willingness of gay men to come out to their family.

Nevertheless, results also show that the Internet sites to which the participants go have little to do with participants' self-acceptance or comfort with disclosure. In other words, H4, H9, and H12 are not supported in the data. A meaningful correlation only exists between comfort with disclosure and instant messaging tools, indicating that the more comfortable the participants are with disclosing their sexual identity, the less frequently they use instant messaging tools. One possible explanation for this is that as the participants get more comfortable coming out to others, they have more opportunities to expand their social network offline rather than using online messaging tools to achieve similar purpose.

Surprisingly, despite the fact that the participants are relatively heavy Internet users, the contents they browse on the Internet have no correlations with their self-acceptance or comfort with disclosure. This finding goes against the theories mentioned in the Introduction section, which suggest that content providing help, support, and friendship would mitigate social isolation and enhance the group members' identity level. Considering the average amount of hours spent on the Internet among the participants, one possible way to account for the existence of no correlations could be that being online with their peer group is sufficient in the identity development process. Whether the websites and contents are oriented toward sexuality may be inconsequential. In addition, the Internet is only a platform to facilitate offline activities that are otherwise difficult to engage in (e.g. to meet other gay men, to participate in gay-theme activities) due to the lack of information sources in real life. That is to say, the Internet, for its intangible nature, may not be able to function as real life experience in terms of identity formation. Nevertheless, we should bear in mind that these data come from a cross-sectional survey, and there were no items regarding participants' offline activities. Hence the reason for the absence of correlations may also be due to the fact that the extent to which the Internet can assist in forming sexual identity has reached saturation among the sample. Those who are still in the developing process may have had less interest in the survey because their basic needs have not been sufficiently met. Thereby, the results may be highly subject to selection bias in which only those who have ceased to use the Internet to help develop their sexual identity were willing to take part in the survey. In terms of methodology, the survey was somewhat lacking in content validity. In the analyses, the researcher has to deduce the participants' intentions of using the Internet by the websites that they frequent and the content that they browse. For instance, when a participant goes to the websites for help and support, his purpose may not be to seek help regarding their

doubts and questions about their sexual identity but rather to look for information about gay venues in the area. This could be problematic and compromise the content validity of the research. Also, regarding measurements, the survey included a substantial number of similar items and used an unconventional scale, namely, percentages, to measure the use of Internet. This may have confused the participants and caused them to give homogeneous responses merely because they may not be able to distinguish the differences between items and understand what was being asked exactly.

Nonetheless, the mediation effect of comfort with disclosure in the relation between selfacceptance and the perceived importance of anonymity is inspiring. The results confirmed H13, H14, and H15. In the Chinese context, coming out is not a personal decision but rather a risky move to "taint" the family reputation. Therefore, a large number of gay men choose to hide their sexual orientation in order to retain the intactness of the "face" of their family, wanting to be seen as a dutiful son. In China, the value of family obligations is still dominating the mainstream culture, thus impeding the coming out process among Chinese gay men. As a result, albeit the fact that more and more individuals are more open about their sexual identity by virtue of the Internet, many are still concerned about another person knowing their sexual orientation. The mediation effect among the sample signifies the saliency of comfort with disclosure in the interplay between self-acceptance and anonymity. Given the reasons mentioned above, anonymity is still a unique and appealing feature to Chinese gay men no matter how well they accept themselves because many still do not feel comfortable disclosing their sexual orientation to heterosexual individuals. Therefore, even though more and more gay men on the Internet are transitioning to higher levels of self-acceptance, the perceived importance of anonymity is still subject to their comfort with disclosure, making it difficult for online gay communities to

transition to offline communities. In other words, despite the substantial amount of gay men frequenting the Internet, it is not yet feasible for them to move to "real life" and build up offline gay communities like their Western counterparts. Offline gay-related interactions will still remain sporadic and in a small scale at least in the near future.

CHAPTER V

CONCLUSIONS

The lack of support for the hypotheses about Internet use calls for a different research paradigm. Using in-depth interviews or content analyses of the users' generated content of the Internet can yield more valid results and provides more fruitful information about the interplay of self-acceptance, comfort with disclosure, and Internet use. In addition, given that, on average, most of the participants already confirmed their sexual identity before they used the Internet for the purpose of obtaining information about sexuality, the recruitment should attain a more sophisticated inclusion criteria; in other words, we should recruit participants that use the Internet for information about sexuality before their confirmation of their sexual identity. Last but not the least, the measure of Internet use should be re-evaluated and reconstructed to be reflective of the target populations' engagement. A participatory approach is needed regarding the content validity of pertinent research. Despite the unique traits of the Internet regarding anonymity, more qualitative research on why the target population wants to use the Internet, what they are doing in order to obtain information about their sexuality, and what role the Internet plays in the exploration of sexuality could be the next step to understand the salience of the Internet in terms of sexual identity.

As revealed by the results, there are a number of suggestions that could improve the current online LGBT websites dedicated to community building. First, a section that offers help regarding how to come out to others for gay men is in need. Disclosing one's sexual orientation is never easy and must be an on-going process throughout one's life given the heteronormative social values in China. Therefore, peer support can be beneficial when one needs suggestions about the coming out techniques. Also, such a section can inform the target population of the risks, loss, and gains of coming out to others and provide supports to those who

have encountered unexpected reactions. The target population can also learn how to cope with the potential adverse psychological outcome caused by coming out. Second, as emphasized throughout the whole manuscript, family is the upmost importance factor in the coming out process; therefore, online communities should dedicate a section to how to deal with the traditional value of family, familial obligation, and communication with family members. This can assist the target population in transitioning from the traditional dominance of family values to a more open-minded value, that they do not have to fulfil their filial piety following the traditional way, namely, getting married to a woman and having offspring. Coming out to family is a long process and needs sophisticated plans. Rather than eschew the topic, a section that helps gay men to prepare themselves for coming out to their family can potentially boost their self-efficacy and motivate them by the successful examples and the benefits that come after it. Exemplary figures can share their coming out stories at a regular basis. Last, a special section for parents with LGBT children can help smooth the coming out process and ease the potential tension between the two generations. The websites can open a hotline for parents to address their concerns or refer them to other specialized organizations.

This study is not without its limitations. One limitation of this study is that all results should be interpreted with caution due to the nature of cross-sectional data. Another limitation is that all results were self-reported and needed further verification through repeated studies. Third, the use of a non-representative sample may impose selection bias as we did not include non-members of the Internet forum in the study. However, in this case, including non-members may have caused overrepresentation of the online sample due to multiple submissions. The organization is known for its expertise in developing Internet-based technologies to merit LGBT individuals and its dedication to constructing online LGBT-community for more than 12 years; it

has a substantial amount of longstanding members as well as newcomers. Therefore we believe that the sample can capture the characteristics of gay men who use the Internet in Guangdong, China.

In sum, these findings provide a general description of the characteristics of gay men who use the Internet in Guangdong, China and the associations between their identity level and Internet use. Results indicate that further research on the facilitating function of the Internet for sexual identity is needed.

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