Original Research

Chinese Culture, Homosexuality Stigma, Social Support and Condom Use: A Path Analytic Model

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Abstract

Purpose: The objective of this study was to examine the interrelationships among individualism, collectivism, homosexuality-related stigma, social support, and condom use among Chinese homosexual men.

Methods: A cross-sectional study using the respondent-driven sampling approach was conducted among 351 participants in Shenzhen, China. Path analytic modeling was used to analyze the interrelationships.

Results: The results of path analytic modeling document the following statistically significant associations with regard to homosexuality: (1) higher levels of vertical collectivism were associated with higher levels of public stigma \( \beta = 0.12 \) and self stigma \( \beta = 0.12 \); (2) higher levels of vertical individualism were associated with higher levels self stigma \( \beta = 0.18 \); (3) higher levels of horizontal individualism were associated with higher levels of public stigma \( \beta = 0.12 \); (4) higher levels of self stigma were associated with higher levels of social support from sexual partners \( \beta = 0.12 \); and (5) lower levels of public stigma were associated with consistent condom use \( \beta = -0.19 \).

Conclusions: The findings enhance our understanding of how individualist and collectivist cultures influence the development of homosexuality-related stigma, which in turn may affect individuals’ decisions to engage in HIV-protective practices and seek social support. Accordingly, the development of HIV interventions for homosexual men in China should take the characteristics of Chinese culture into consideration.

Keywords: collectivism, HIV/AIDS, homosexuality, individualism

Introduction

Homosexual men in China are facing two intertwined threats: homosexuality-related stigma and HIV infection. Since a significant proportion of homosexual men engage in HIV-risk behaviors, the HIV epidemic has been spreading in this stigmatized population in China (Wang et al., 2009). As in some other countries, homosexuality is largely unacceptable in Chinese society, homosexual men are thus widely stigmatized (Liu & Choi, 2006; Liu, Liu, Cai, Rhodes & Hong, 2009a).

Stigma has been defined as a discrediting attribute that decreases the status of an individual who possesses a characteristic that is undesirable in the eyes of society (Goffman, 1963). Conceptually, there are three forms of stigma: structural stigma, public stigma and self stigma. Structural stigma refers to the policies of private and public institutions or organizations that restrict the opportunities of stigmatized groups, and is created by socio-political forces (Corrigan et al., 2005). Public stigma refers to the general public’s negative attitudes, beliefs or reactions towards people
with stigmatized attributes, such as homosexuality (Corrigan, 2004). This type of stigma can be perceived or experienced by homosexual men. However, self stigma or internalized stigma, refers to the fear, perceived by people who have such stigmatizing attributes, of societal attitudes and potential discrimination (Scambler, 1998). In a society that widely endorses stigmatizing attitudes, homosexual men may internalize these attitudes and believe that they should be stigmatized or discriminated against. Research has demonstrated homosexuality-related stigma and its consequences in populations of homosexual men (Diaz, Ayala & Bein, 2004; Neillands, Steward & Choi, 2008). Stigma is a complicated issue which is believed to be deeply rooted in culture (Valdiserri, 2002). Different forms of stigma have been identified in countries with different cultures (Murthy, 2002). Therefore, it is necessary to take the specific local culture into consideration when investigating the formulation and consequences of stigma.

Culture has been defined as a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life (Matsumoto & Juang, 2008). It has further been categorized into two main dimensions: collectivism and individualism (Triandis, 1995). Individuals in a collectivist culture tend to see themselves as interdependent within their groups and usually behave according to collectivist social norms. People in a collectivist society are advised to exercise emotional restraint in order to avoid shame and save face (Yang & Kleinman, 2008). In contrast, individuals in an individualist culture see themselves as independent of groups and generally behave according to personal choices. Individualistic people are motivated by their self-interests, which are often valued over the interests of their in-groups (Triandis, 1995). Both individualist and collectivist orientations coexist within individuals and cultures. For example, based on their studies, Ho and Chiu concluded that, although Chinese culture is more collectivist than individualist, both individualist and collectivist values are endorsed within Chinese culture (Ho & Chiu, 1994).

To measure cultural orientations at the individual level, Triandis proposed two sub-dimensions of individualism and collectivism (Triandis, 2001). In the vertical dimension, societies are hierarchically structured; members tend to accept inequality and acknowledge the importance of social status. In the horizontal dimension, societies are egalitarian in structure; members accept interdependence and equal status for all. Triandis proposed four types of cultures from these sub-dimensions (Triandis, 2001). Horizontal individualism is where people want to be unique and do their own thing. Vertical individualism is where people want to do their own thing and also to be the best. Horizontal collectivism is where people merge themselves with their in-groups. Vertical collectivism is where people submit to the authorities of the in-group and are willing to sacrifice themselves for their in-group. Although the consequences of individualism and collectivism have been conceptualized, few empirical studies have examined these consequences, including their consequences for homosexuality-related stigma.

Influenced by a collectivist culture, Chinese people tend to subordinate personal interests to those of the group or collective (Hui & Triandis, 1986). Individuals who are considered non-conforming to group values are devalued by a collectivist society. In China, homosexuality is not considered to be conforming to a group value (Lin & Lin, 1981). Therefore Chinese culture may foster homosexuality-related stigma. According to Confucianism, individuals are defined within the context of their familial relationships (Neillands et al., 2008). The cultural imperative of familial responsibility, rather than individual rights, results in the stigmatization of not only homosexual individuals, but also their family members (Lin, 1981). Many Chinese homosexual men are married to women while continuing to have secret homosexual relationships (Neillands et al., 2008; Wong et al., 2009). No studies have examined the relationships between the specific dimensions of Chinese culture and homosexuality-related stigma. Based on the above literature review, we hypothesized that high levels of collectivism would be positively associated with HIV-related stigma and homosexuality-related stigma, while high levels of individualism would be negatively associated with these two types of stigma.

HIV- and homosexuality-related stigma can affect social support and HIV prevention practices. A recent meta-analysis of 21 studies reported that HIV stigma was negatively associated with social support (Smith, Rossetto & Peterson, 2008). Studies also found that individuals who were socially stigmatized tended to seek support from people with similar conditions. For example, people living with HIV/AIDS were more likely to seek support from others living with HIV/AIDS (Davison, Pennebaker & Dickerson, 2000). Similarly, while gay men who were psychologically distressed were less likely to seek social support, a higher acceptance of gay identity at the community level led to a higher level of seeking for social support (Turner, Hays & Coates, 1993). Moreover, research has revealed that high levels of stigma are associated with inconsistent condom use and are also associated with increased likelihood of engagement in sexual-risk
behaviors for HIV among homosexual men (Preston et al., 2004; Ryan, Huebner, Diaz & Sanchez, 2009). Based on these empirical studies, we further hypothesized that higher levels of HIV- and homosexuality-related stigma experienced by homosexual men were associated with inconsistent condom use, higher levels of social support from sexual partners, and lower levels of social support from non-sexual-relation peers. The hypothesized interrelationships among individualist and collectivist cultures, HIV- and homosexuality-related stigma, social support and condom use are shown in Fig. 1.

Methods

Study Site and Subjects

The study site has been previously described (Liu et al., 2009a). A cross-sectional study was conducted among homosexual men in Shenzhen City, China. Shenzhen, the first special economic region in China, is located along the southern coast of China, bordering Hong Kong and Guangzhou. An estimated 60,000 homosexual men live in the city (Feng et al., 2005). A man was eligible for this study if he: (1) was between 18 and 45 years old; (2) reported having engaged in anal intercourse with one or more men in the past year; and (3) had lived in Shenzhen for more than 3 months at the time of the interview.

Respondent-driven Sampling (RDS)

The respondent-driven sampling approach was used to recruit homosexual men (Heckathorn, 1997). We selected 12 homosexual men who served as ‘seeds’. The seeds received an explanation of the study’s purpose and three coupons to recruit other homosexual men from their network. All new recruits in the subsequent waves received an anonymous interview and three coupons. The respondent-driven sampling approach generated a sample that covered a broad cross-section of the target population, indicating acceptable representativeness (Liu et al., 2009a). The study protocol was approved by the Institutional Review Boards of Virginia Commonwealth University and Chinese Center for HIV/STD Control and Prevention.

Interview

Eligible subjects participated in a face-to-face anonymous interview in a private room. All interviewers received intensive training in interviewing techniques, developing rapport, and ensuring confidentiality before conducting the interviews. A pilot test of the interviewers’ skills, questionnaires, and respondent-driven sampling procedures were performed with 10 homosexual men in order to ensure suitability of language and context.

Measurements

Stigma

The psychometric assessment of HIV stigma, public homosexual stigma, and self-homosexual stigma among this homosexual men sample of has been reported (Liu, Feng, Rhodes & Liu, 2009b). Public HIV stigma was measured with seven items (e.g., HIV infected people would lose their friends if they knew their HIV status). Public homosexual stigma was
measured with 10 items (e.g., Many people would treat a gay individual differently than they would treat others). Self-homosexual stigma was measured with eight items (e.g., I am afraid that my family and friends would find out about my sexual orientation). Higher scores on these measurement scales indicated a greater perception of HIV and homosexual stigma. The Cronbach coefficient alpha was 0.81 for HIV stigma, 0.85 for public homosexual stigma, and 0.78 for self-homosexual stigma. All measures are available from the authors on request.

**Individualism and collectivism**

Individualism and collectivism were measured in a scale adapted from the scales developed by Triandis (Triandis, 1995) and Chirkov et al. (Chirkov, Ryan, Kim & Kaplan, 2003). Horizontal individualism was measured with eight items (e.g., I would like to do what I like. I do not care about what others think). Vertical individualism was measured with seven items (e.g., I will try my best to do things well. I do not like to fall behind others). Vertical collectivism was measured with six items (e.g., I could give up a personal pursuit or interest in order to take care of my family). Horizontal collectivism was measured with five items (e.g., I will try my best to maintain harmony in a community or a group). Respondents were asked to rate the extent of their agreement to these items across a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score for each dimension was calculated by summing all item scores. The Cronbach coefficient alpha was 0.66 for vertical individualism, 0.57 for horizontal individualism, 0.51 for vertical collectivism, and 0.60 for horizontal collectivism.

**Perceived social support**

Perceived social support was measured in an inventory modified from the Norbeck Social Support questionnaire (NSSQ) (Norbeck, Lindsey & Carrieri, 1983; Liu, et al., 2009c). Six items were used to measure social support that homosexual men perceived to receive from sexual partners and non-sexual-partner peers (such as family members, teachers, classmates, colleagues, villagers and others). Respondents rated the possibility of perceived social support from 0 (not possible at all) to 4 (quite sure). Example items are take care of the respondent if he was confined to bed for 2–3 weeks; agree with or support the respondent’s actions or thoughts; or make the respondent confide in the network members. The total score for each perceived social support source was calculated by summing all individual item scores. Reliability measured by Cronbach’s coefficient alpha was 0.75 for non-sexual-partner peers’ support and 0.70 for sexual partners’ support.

**Consistent condom use**

Participants were asked about the frequency of condom use in the past six months. The frequency was dichotomized as using condoms for every sexual act (consistent condom use) and not using condoms for every sexual act (inconsistent condom use).

**Analysis**

Pearson correlation coefficients were estimated to describe the degrees of associations among variables of interest. Path analytic modeling was performed to test the hypothesized interrelationships presented in Fig. 1. Standardized coefficients (β) for all paths were estimated. The goodness-of-fit of models was assessed by a non-significant $\chi^2$ value, root mean square error of approximation (RMSEA) ≤ 0.06, Tucker Lewis Index (TLI) ≥ 0.90, and comparative fit index (CFI) ≥ 0.95 (Hu & Bentler, 1999; Bryan, Schmiege & Broaddus, 2007). These analyses were completed using Mplus 4 (Muthen & Muthen, Los Angeles, CA, USA).

**Results**

**Descriptive Statistics and Correlations**

A total of 351 homosexual men were recruited and interviewed. Sixteen subjects did not provide data on condom use and were excluded from the analysis, making a final sample of 335 homosexual men. The mean age of respondents was 27 years [ranging from 18 to 44 years old, standard deviation = 6.3]. Sixty-five percent of homosexual men had a high school education or higher. Thirty-eight percent worked in entertainment venues, such as bars, bathhouses, karaoke bars, and dancing halls, while 61% reported other types of work such as construction, factory, business, and self-employment. The majority of the respondents were single (78%). Sixty-one percent reported having used condoms for every sex act in the past six months.

Table 1 presents means, standard deviations and correlations for variables that were used in the path analytic model. Some correlations were statistically significant, e.g., higher levels of vertical collectivism were significantly correlated with higher levels of public HIV stigma, higher levels of public homosexual stigma, higher levels of self-homosexual stigma, higher levels of horizontal collectivism, and higher levels of vertical individualism. Although these correlations were significant, the correlation coefficients ranged from small to moderate in size, and this may suggest that the original hypothesized path model may be a poor fit for the data.
Path Analytic Model Analysis

Based on the relationship paths presented in the hypothesized model (Fig. 1), a standardized coefficient was estimated for each of the paths. The assessment of goodness-of-fit documented that this model did not fit data well ($\chi^2 = 24.0$, df = 20, $p = 0.01$, n = 335). The value of RMSEA, TLI and CFI was 0.06, 0.89, and 0.73, respectively, indicating that the fit between model and data needed to be improved.

Due to the highly significant correlation between public homosexual stigma and public HIV stigma ($r = 0.44$, $p < 0.01$), we modified the model by removing all paths connected to public HIV stigma. In addition, we attempted to add two paths from perceived social support either from sexual partners or non-sexual-partner peers to condom use. However, the coefficients on the two paths (from the two types of perceived social support to condom use) were very low ($\beta = 0.02$, $p > 0.05$, and $\beta = -0.1$, $p > 0.05$) and the overall model fit was not acceptable. The revised model (the final model in Fig. 2) fit the data well. It had a non-significant model chi-square value ($\chi^2 = 8.3$, df = 9, $p = 0.59$, n=335), and better values on the TLI (0.91), CFI (0.95), and RMSEA (0.045). The following relationships were found to be statistically significant in the revised model: (1) higher levels of vertical collectivism were significantly associated with higher levels of public homosexual stigma ($\beta = 0.12$; that is, each 1 standard deviation increase in vertical collectivism results in a 0.12 standard deviation increase in public homosexual stigma score) and higher levels of self-homosexual stigma ($\beta = 0.12$); (2) higher levels of vertical individualism were significantly associated with higher levels of self-homosexual stigma ($\beta = 0.18$); (3) higher levels of horizontal individualism were significantly associated with higher levels of self-homosexual stigma ($\beta = 0.29$).

Discussion

This study provides support for the expectation that collectivism and individualism may affect public and self-homosexual stigma, which, in turn, may influence decisions made by homosexual men to engage in HIV prevention practices and to seek social support. Although the interrelationships among cultural factors, stigma, social support, and protected sex are complicated, understanding them may facilitate the development of effective HIV prevention interventions for homosexual men. To the best of our knowledge, this is the first quantitative study of its kind to look at these interrelationships among homosexual men.

This study supports the previous documentation of the co-existence of both individualist and collectivist orientations in Chinese culture. Findings revealed that Chinese homosexual men with a higher level of vertical collectivism appear to experience greater levels of both public and self-homosexual stigma. Vertical collectivism-oriented individuals usually submit to the...
authorities of the in-group and are willing to sacrifice themselves for their network peers (Triandis, 2001). Because homosexuality is not accepted by Chinese society, and is strongly disapproved of by authority figures (such as elders, team leaders, or parents), homosexual men may pay special attention to their authority figures’ feelings and reactions to their homosexuality. Consequently, they may perceive a higher degree of stigma. In addition, deeply influenced by Confucianism, Taoism, and Buddhism, Chinese culture emphasizes not only egalitarianism but also team responsibility and sacrifice (Triandis, 1995). The rejection of homosexuality by their society may make homosexual men feel that they lose their dignity or face, and damage group values. One unexpected finding is that the level of horizontal collectivism is not associated with homosexuality-related stigma. Horizontal collectivism-oriented individuals tend to merge themselves with their in-groups. They may not perceive a high degree of stigma if the in-group peers are also homosexual men. However, additional research, especially using a qualitative approach, is needed to explain why there is no such association.

This study documented that vertical individualism was positively associated with self-homosexual stigma while horizontal individualism was positively associated with public homosexual stigma. This finding appears to contradict characteristics of individualism, as individuals with such orientation often disassociate with others’ concerns, place self-interest above those of the group, and do their own things regardless of group disciplines (Ho & Chiu, 1994). Presumably, homosexual men with high levels of individualism would not care about stigma attached to their homosexuality. One possible explanation for our findings is that individualism-oriented homosexual men may perceive that their desire for uniqueness or their passion for self-accomplishment is challenged by the larger collectivist community where homosexual behavior is not accepted and homosexuality-related stigma is highly displayed. They may feel marginalized because both individualism and homosexuality are not in harmony with their social or cultural environment where collectivism prevails. The marginalization of homosexual individuals may provoke stigma among homosexual men because their uniqueness and the best status are neither valued nor accepted by their community and, consequently, by themselves.

While HIV-related stigma was not associated with consistent condom use, public homosexual stigma was inversely related to condom use. When HIV-related stigma was removed from the model, public homosexual stigma remained inversely associated with consistent condom use (Fig. 2). HIV-related stigma may not be a major concern to homosexual men because they know that the majority of their peers are not infected with HIV. The main reason that people stigmatize and discriminate against HIV-infected individuals is that they do not accept their behavior or the practices through which individuals are infected (i.e., through sex or drug injection). Homosexual men may perceive that the public’s stigmatizing attitudes towards their identity of homosexuality is more important and substantial than HIV stigma.

In a society that ostracizes homosexuals, these men may choose practices that are less likely to lead to disclosure of their sexual identity. Due to the fear of disclosure of their homosexuality and the consequent discrimination, homosexual men may not participate.

Fig. 2. Standardized coefficients for paths in the final path model [($\chi^2 = 8.3$, df=9, $p=0.59$, n=335); TLI = 0.91; CFI = 0.95; RMSEA = 0.045]. *$p \leq 0.05$; **$p \leq 0.01$. 

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in HIV intervention programs, thus limiting their exposure to prevention messages. Liu and Choi (2006) reported that, in order to avoid the disclosure of their sexual identity, homosexual men may not engage in safer sex, or refuse to accept health outreach services even when these services were free. Our finding suggests that HIV intervention programs targeting homosexual men should include prevention or reduction of homosexuality-related stigma. For example, education programs targeted towards community members about homosexuality and the need for tolerance, such as has been done in HIV-related stigma programs, may be particularly helpful. Decreasing public homosexual stigma may also help decrease self-homosexual stigma due to a reduction in discriminating attitudes from community members.

Homosexual men who have a high degree of self-homosexual stigma perceived more social support from their sexual partners, but not from non-sexual-partner peers. It is possible that homosexual men do not want to receive social support from non-sexual-partner peers because they may be concerned about rejection, especially in a collectivist society where homosexuality is disapproved of and stigmatized (Liu et al., 2006). A previous study among homosexual men in China also found that they continue to fear being rejected by their families or losing their job if they disclose their sexual preference (Choi, Diehl, Yaqi, Qu & Mandel, 2002). However, they may seek social support from their sexual partners because their sexual partners may share the same sexual issues and concerns, can be trusted, and will help them without stigmatizing them. This finding is consistent with findings of a study reporting that those who are socially stigmatized tend to seek support from people with similar conditions (Davison et al., 2000). Our findings imply that the formulation of peer support groups in homosexual men’s sexual networks may provide them with comfortable venues where they can discuss solutions to cope with homosexual stigma and receive social support. These peer support groups can also be an avenue for the introduction of messages about the importance of condom use in all sexual encounters using the popular opinion leader strategy whereby key opinion leaders in certain populations are identified, trained and enlisted to help educate others in their group (Kelly, 2004).

There are several limitations that should be noted in our study. First, the study subjects were recruited from Shenzhen city which is not representative of all cities in China. Therefore, generalization of the findings to other populations of homosexual men should be made with caution. Since our study employed a cross-sectional design, findings should not be interpreted beyond associations. Reverse relationships may occur in cross-sectional studies; however, this may not be an issue in this study due to the nature of the variables being analyzed (e.g., stigma cannot cause or create culture, and condom use in a sexual encounter cannot create public homosexual stigma). Although Cronbach’s alphas were low for the four cultural constructs, factor analysis of the dimensionality indicated that there were four distinct sub-dimensions reflecting four subscales of collectivism and individualism. According to Cronbach’s (1990) argument of bandwidth and fidelity, if a measurement scale is designed to measure complicated and multifaceted phenomena (such as individualism and collectivism), and it includes a wide range of constructs for the enhancement of its measurement validity, then its internal consistency is usually compromised. As argued by Cronbach & Gleser (1965) and Singlis, Triandis, Bhawuk & Gelfand (1995) measurement scales with relatively low alphas do not necessarily mean that they are also low in validity. Previous studies have reported the reliability of horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism scales measured by Cronbach’s alpha was from low to moderate (between 0.52 and 0.74) (Singlis et al., 1995; Lee & Choi, 2005). Nevertheless, future studies are needed to improve their reliability of the sub-scales.

Conclusion

These findings enhance our understanding of how stigma is influenced by individualism and collectivism, how it affects decisions to engage in HIV protective behaviors, and how it alters perceived social support among homosexual men. Given the potential influence of individualist and collectivist cultures on stigma and safer sex, the development of HIV interventions for homosexual men should take the specific characteristics of Chinese culture into consideration, and the prevention of homosexuality-related stigma should be an important component of HIV intervention programs.

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References


