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Well-being of Chinese Sexual Minority Men in Mixed-Orientation Marriages:  
The Relative Contributions of Relationship Qualities and Sexual Identity

THESIS

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by

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## **DEDICATION**

To

my family

in recognition of their support

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## **ABSTRACT OF THE THESIS**

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Very little research has examined the well-being of sexual minority men in mixed-orientation marriages—a marital union wherein one spouse is gay, lesbian, or bisexual while the other is heterosexual. Examining men’s well-being in such marital contexts provides insights into how sexual orientation intersects with relationship dynamics to shape mental health for minority individuals in heteronormative societies. Based on survey responses from 79 sexual minority men who were in mixed-orientation marriages while also engaging in a same-sex relationship, the current exploratory study examined the relative contributions of marital relationship quality, same-sex relationship quality, and sexual identity to sexual minority men’s psychological well-being. Results of hierarchical linear regressions showed that (1) measures of marital relationship quality were not significantly associated with sexual minority men’s psychological well-being, (2) positive sexual identity was significantly and negatively associated with depression and loneliness, and (3) same-sex relationship satisfaction was significantly and negatively associated with loneliness. Discussion pays particular attention to the sociocultural contexts that in part shape sexual minority men’s situations in mixed-orientation marriages.

## INTRODUCTION

Despite growing social acceptance towards diverse relationships among the gay, lesbian, bisexual, and transgender (LGBT) community across the globe, the hegemonic ideology of heterosexual marriage persists as the “better” way of “doing” marriage. Whereas some sexual minority individuals have had privileges to marry their same-sex partners, others end up marrying heterosexual women. Mixed-orientation marriage refers to a marital union in which one spouse is gay, lesbian, or bisexual while the other is heterosexual. This particular marital formation has in part resulted from the lack of legal recognition of same-sex partners as well as low social acceptance of sexual minority individuals (Buxton, 2005). Due to the emphasis on traditional marriage in society, individuals who have never questioned or explored their sexuality or who hide and deny their attraction to the same sex decide to enter heterosexual marriage despite having homosexual attraction (Buxton, 2005).

In China where heteronormativity and rigid gendered expectations prevail, many sexual minority men have to conceal their sexual orientation and instead marry a woman, which could lead to mental health consequences for both sexual minority men and heterosexual women involved (Xing, 2012). To uncover the factors that might have shaped sexual minority men’s well-being in mixed-orientation marriages in China, the current exploratory study examines the relative contributions of marital relationship qualities, same-sex relationship qualities, and positive sexual identity to the mental health of a unique group of sexual minority men who manage marital relationship and same-sex relationship simultaneously.

## CHAPTER 1: LITERATURE REVIEW

### **Sexual Minority Men in Marriage**

Many gay and bisexual men have been entering heterosexual marriages. Previous studies suggest that they marry heterosexual women for a variety of reasons, including the unawareness or denial of their same-sex desire at time of marriage (Buxton, 2005), pressure from the society or religious community (Ortiz and Scott, 1994; Yarhouse, Pawlowski, & Tan, 2003), the desire to have biological children and family life (Higgins, 2002; Pearcey, 2005), and pressure to fulfill familial obligations (Jaspal, 2014; Lee, 2002; Zheng, 2015). However, being in heterosexual marriages does not refrain gay and bisexual men from exploring or acting upon their same-sex desire. In fact, many sexual minority men engage in same-sex relationships outside of their marriages secretly (Buxton, 2005), which might have consequences for both themselves and their heterosexual wives—especially when their wives find out such “affairs”—as they navigate two types of relationships simultaneously.

Scholarly attention has rarely been paid to this group of men. A closer examination of those few relevant qualitative studies conducted in the US reveals that gay and bisexual men married heterosexual women largely due to their own internalization of societal norms to appear “normal” or to embrace a mainstream family life. Of those few quantitative studies focusing on these men in the US, most have focused on identifying predictors of marital relationship quality, highlighting the unique contributions of marital commitment (Kays, Yarhouse, & Ripley, 2014), marital sex (Gnilka & Dew, 2009), and openness about sexual orientation with wives (Tornello & Patterson, 2012). Only one study (Malcolm, 2008) included a measure of psychological distress and reported that positive LGB identity (i.e., identification as a Lesbian, Gay, Bisexual person) was associated with higher psychological adjustment for gay men in heterosexual

marriages. Given that both marital relationship quality and romantic relationship quality (e.g., same-sex relationship quality for sexual minority men) have been shown to be associated with well-being, (Dush & Amato, 2005; Kim & McKenry, 2002; Proulx, Helms, & Buehler, 2007), examining how the unique heterosexual marital context affects psychological adjustment of sexual minority men who might be managing relationships with both their wives and same-sex partners becomes an important research question.

### **Sexual Minority Men, Mixed-Orientation Marriages, and the Chinese Society**

Afraid of coming out in a society highly stigmatized towards same-sex desire, many gay and bisexual men in China have been pressured by parents and family members to enter heterosexual marriage, which results in many Chinese gay men marrying heterosexual women. Chinese society has historically prioritized interdependent relationships (e.g., Nisbett, Peng, Choi, & Norenzayan, 2001); thus, children are socialized to prioritize familial relationships in their early ages. Chinese parents initiate plans and provide guidance to their children throughout their lives, with the expectation that they would be respected and be taken care of by their children when they get old. Children's obedience to parents is regulated by filial piety, one of the more important Confucian values (Shek, 2006). According to Wang and Hsueh (2000), Chinese children are obligated to listen to their parents' opinions on marital, occupational, and other life decisions. For example, many Chinese will seek their parents' approval of their partners before formally getting married. Moreover, partially due to the Confucian values that prioritize filial piety and the continuation of the family blood (Shek & Lai, 2000), a man who marries and has a child—ideally if the child is a boy—is considered filial.

However, being gay in such sociocultural context can be difficult because of the pressure to marry and form a nuclear family. The pressure from Chinese parents to their sons regarding

marriage and having children has increased tremendously since the implementation of the one-child policy because that is the only way to continue the blood of the family. Indeed, as a 44-year-old single gay man in Liu and Choi's qualitative study (2006) described, "...many people will require you to get married! Such as siblings, parents, relatives, colleagues, usually this makes me fly into a rage of anger" (p. 28).

Moreover, the family environment can be stigmatizing for gender and sexual minorities in China. A national survey concerning being LGBTI in China conducted by United Nations Development Programme (2016) revealed that Chinese gender and sexual minorities experienced significantly more discrimination in family settings than that experienced in schools, workplaces, and religious communities. Further, the study showed that nearly two thirds of sexual minorities felt pressured by family to enter heterosexual marriage and have children.

Therefore, sexual minorities in China are confronting considerable familial pressure to enter heterosexual marriage; for sexual minority men, the pressure is even higher, which has often rendered them oscillating between filial obligation (i.e., marriage and have children) and self-actualization related to their sexuality (e.g., coming out and being the true self). Not surprisingly, many Chinese gay men have been reported to enter and stay in heterosexual marriage in China (Xing, 2012). According to a divorced 47-year-old Chinese gay man referring to his previous marriage, "having sex with women wasn't because I wanted to. It's all because of social pressure to continue the lineage..." (Liu & Choi, 2006, p. 29). Therefore, for many sexual minority men in China, marrying a woman may have more to do with deceiving their parents and temporarily avoid familial and social pressure than with following their own wishes.

Surprisingly, however, no empirical studies to date have addressed the well-being of Chinese sexual minority men in heterosexual marriages, perhaps because this population is

largely invisible and hard to reach. Considering that many of them are engaging in two types of romantic relationship simultaneously—that is, one resulting from societal and familial pressure, the other related to their same-sex desire, the potential consequences of such a lifestyle on their well-being are worth investigating. Moreover, in light of productive lines of research in Western industrial societies emphasizing the self (e.g., LGB identity) and studies from China pinpointing interdependent relationships, of great interest is also the ways in which sexual identity influences well-being of sexual minority men in mixed-orientation marriages. Thus, as globalization increasingly affects China where sexual diversity is more often talked about than before, a study is needed to uncover the relative contributions of marital relationship quality, same-sex relationship quality, and sexual identity to Chinese sexual minority men's well-being.

## CHAPTER 2: THE CURRENT STUDY

### **Aims and Hypotheses**

The current cross-sectional survey study aims to examine the psychological well-being of sexual minority men in heterosexual marriages in China, particularly paying attention to the ways in which marital relationship quality, same-sex relationship quality, and positive sexual identity (i.e., the extent to which one is comfortable with one's sexual orientation) shape mental health outcomes. Specifically, the first aim is to examine the relation between sexual identity and well-being of sexual minority men in heterosexual marriages in China. Considering that positive sexual identity is widely assumed to be associated with better mental health outcomes based on research using Western LGB samples (e.g., Meyer, 2003; Mohr & Kendra, 2011), it is hypothesized that positive sexual identity would be correlated with better well-being (i.e., lower depression, higher satisfaction with life) for Chinese sexual minority men in heterosexual marriages.

This second aim of the study is to test whether there is a spillover effect between marital relationship quality and same-sex relationship quality. Previous research consistently shows that relationship dynamics in family settings shape one another (e.g., marital bonds vs. parent-child bond; Kourou, Papp, Goeke-Morey, & Cummings, 2014). Given the Chinese sociocultural contexts wherein same-sex relationship is incompatible with heterosexual marital relationship for many sexual minority men, it is hypothesized that dimensions of marital relationship quality would be significantly and negatively correlated with dimensions of same-sex relationship quality. For example, participants' report of marital satisfaction would be negatively and significantly correlated with same-sex relationship satisfaction.

The third aim of the study is to investigate the relative contributions of marital relationship quality, same-sex relationship quality, and sexual identity to psychological well-being of Chinese sexual minority men in heterosexual marriages. It is expected that (1) same-sex relationship quality and sexual identity will be uniquely and significantly associated with well-being whereas marital relationship quality would not and that (2) same-sex relationship quality would be a better predictor of well-being than sexual identity for Chinese sexual minority men.

### **Participants**

The study sample consists of 79 sexual minority men in mixed-orientation marriages and had a same-sex relationship at time of the survey. Among initial survey data received from 103 sexual minority men, 14 were incomplete and lacked data on some of the main measures (e.g., depression), five indicated that they had not been in a same-sex relationship during the past 6 months, and five indicated that they ended their same-sex relationship recently. Thus, the final study sample included data from 79 men.

Participants aged from 24 to 61 years old ( $M = 37.51$ ,  $SD = 8.06$ ). A majority of them identify as gay ( $N = 59$ , 74.7%), with the rest identifying as bisexual. At time of the survey, the average of years of marriage was 11.25 years ( $SD = 9.05$ ), and the average years of current same-sex relationship was 1.84 years ( $SD = 2.32$ ). In terms of educational attainment, more than half of them did not have a 4-year college degree ( $N = 42$ , 53.2%), about one-third of them have a 4-year college degree ( $N = 26$ , 32.9%), and 11 (13.9%) have master's degree or higher. In terms of annual income, an indicator for socioeconomic status (SES), one fourth of them ( $N = 20$ , 25.3%) earn less than 50,000 yuan, about half of them earn between 50,001 to 150,000 yuan ( $N = 42$ , 53.2%), and 17 (21.5%) earn more than 150,000 yuan per year. According to the official

definition of middle class in China (60,000 to 500,000 yuan; China Power Team, 2018), a majority of men in the current sample can be considered as middle class.

## **Procedures**

Participants were recruited from online support groups of married gay and bisexual men as well as non-profit organizations serving the needs of heterosexually married sexual minority men in China between November 2018 and March 2019. Some of the survey measures (i.e., sexual identity and well-being measures) were adopted from a previous study with LGB young adults in China (Shao, Chang, & Chen, 2018), while others (i.e., relationship quality measures) were translated and back-translated by two bilingual research assistants. They each translated half of the measures independently from English to Chinese. They then exchanged the Chinese translations and back-translated them from Chinese to English. The study team met twice to discuss any incongruence in the translation process, and the final survey was approved by all team members.

Study information sheet and the online survey link were disseminated to organization directors who then reached out to their members. To participate, participants need to: (1) self-identify as a sexual minority man, (2) currently be married to a heterosexual woman, and (3) currently be in a same-sex romantic relationship. Upon finishing the survey, participants were entered into a raffle winning one of twenty gift cards (approximately \$15 each). All procedures were approved by the Institutional Review Board before data collection.

## **Measures**

**Demographics.** Participants were asked to indicate their age, sexual orientation (1 = gay, 2 = bisexual, 3 = other), educational attainment (1 = less than four-year college, 2 = four-year college, 3 = graduate degree or higher), and years of marriage and current same-sex relationship.

**Marital relationship quality.**

**Marital satisfaction.** The three-item Kansas Marital Satisfaction Scale (Schumm et al., 1986) was used to measure marital satisfaction. Participants rated their marital satisfaction with wives on a 7-point Likert-type scale (1 = extremely dissatisfied, 7 = extremely satisfied). One sample item was “how satisfied are you with your marriage?” ( $\alpha = .90$ )

**Marital conflict.** A two-item conflict subscale of the Revised Dyadic Adjustment Scale (Busby, Christensen, Crane, & Larson, 1995) was used to measure marital conflict. Participants indicated their frequency of conflict with wives on a 5-point Likert-type scale (0 = All the time, 5 = Never). One sample item was “how often do you and your wife quarrel?” ( $\alpha = .78$ )

**Marital commitment.** A seven-item commitment subscale of the Investment Model Scale (Rusbult, Martz, & Agnew, 1998) was used to assess participants’ commitment to their heterosexual marriage. They indicated their commitment to their current marriage in an 8-point Likert-type scale (1 = do not agree at all, 8 = agree completely). One sample item was “I want our marriage to last forever.” ( $\alpha = .88$ )

**Same-sex relationship quality.** The same three measures assessing *marital relationship quality* were used to measure qualities of *same-sex relationship*, with all item wordings referring to participants’ current (most important) same-sex partners instead of wives. ( $\alpha$ s = .94, .73, .79 for satisfaction, conflict, and commitment, respectively)

**Sexual identity.** A nine-item short form of the LGB identity scale (Mohr & Kendra, 2011) was used to assess the extent to which participants were comfortable with their gay and

bisexual identity—that is, the extent to which one internalizes homophobia, conceals same-sex relationships, and expects unacceptance from others towards their same-sex desire. They indicated the extent to which they agree or disagree with statements about their self-perception of sexual identity on a 6-point Likert-type scale (1 = *Strongly disagree*; 6 = *Strongly agree*). A sample item was “I wish I were heterosexual.” All items were reverse coded to reflect positive sexual identity. ( $\alpha = .84$ )

**Depressive symptoms.** The ten-item Center for Epidemiologic Studies Depression Scale (Andresen, Malmgren, Carter, & Patrick, 1994) was used to measure participants’ depressive symptoms. Participants indicated how often they experienced stated feelings in the past week on a 4-point Likert-type scale (0 = *rarely*, 3 = *all of the time*). A sample item was “I feel depressed.” ( $\alpha = .86$ )

**Life Satisfaction.** The five-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) was used to measure participants’ life satisfaction. They indicated the extent to which they agree or disagree with statements about their life on a 6-point Likert type scale (1 = *Strongly disagree*, 6 = *Strongly agree*). A sample item was “I am satisfied with my life.” ( $\alpha = .87$ )

**Loneliness.** An eight-item revised short form of the UCLA Loneliness Scale (Russell, Peplau, and Cutrona, 1980) was used to assess participants’ loneliness. Participants were asked how often they experience feelings related to loneliness on a 4-point Likert-type scale (1 = *Never*, 4 = *Often*). A sample item was “I feel left out.” ( $\alpha = .78$ )

## CHAPTER 3: RESULTS

### **Does Positive Sexual Identity Correlate with Psychological Well-being?**

To answer this question, bivariate correlation analyses were conducted. Given that numerous research studies show a significant association between positive sexual identity and psychological well-being (e.g., lower depression, higher life satisfaction; Meyer 2003), it was hypothesized that a positive sexual identity would be significantly and negatively correlated with depression and loneliness but significantly and positively correlated with life satisfaction. As can be seen in Table 1, positive sexual identity was significantly and negatively correlated with depression ( $r = -.29, p < .05$ ) and loneliness ( $r = -.37, p < .001$ ). However, positive sexual identity was not significantly correlated with life satisfaction.

### **Does Dimensions of Marital Relationship Quality Correlate with Same-sex Relationship Quality?**

Of interest is the question whether dynamics of marital relationship quality would be significantly correlated with dynamics of same-sex relationship qualities for sexual minority men who manage two types of romantic relationships simultaneously. For example, due to the dilemma of managing two types of relationships that seem incompatible, sexual minority men who experience significantly higher marital satisfaction might report lower satisfaction of their same-sex relationships. However, as can be seen in Table 1, contrary to the hypothesis, none of the dimensions of marital relationship quality were significantly correlated with dimensions of same-sex relationship quality.

Of note, however, is that many of the intra-correlations among dimensions within both marital relationship quality and same-sex relationship quality (e.g., marital satisfaction & marital conflict) were significant, pinpointing the connection of satisfaction, conflict, and commitment in

shaping relationship quality. To explore whether correlations among these dimensions of marital relationship quality were significantly different from correlations among dimensions of same-sex relationship quality, Fisher z scores were calculated. As can be seen in Table 2, all of three correlation coefficients indicating relations among three dimensions of marital relationship quality were significantly different from those indicating relations among three dimensions of same-sex relationship quality. This would suggest, for example, commitment and conflict were important factors shaping relationship satisfaction more for marital relationship than for same-sex relationship.

### **Which factors Make Unique Contributions to Sexual Minority Men's Well-being?**

To test the relative contributions of marital relationship quality, same-sex relationship quality, and sexual identity to the psychological well-being of sexual minority men in mixed-orientation marriage, three 4-step hierarchical linear regressions were performed. In each model, Step 1 included age, sexual orientation, income, educational attainment, years of marriage, and years within current same-sex relationship. Step 2 included positive sexual identity. Step 3 included marital satisfaction, marital conflict, and marital commitment. Step 4 included same-sex relationship satisfaction, same-sex relationship conflict, and same-sex relationship commitment.

**Depression.** Contrary to the hypothesis, results suggested that only positive sexual identity was a significant predictor of depression. The full model, inclusive of all 4 steps, was not significant, [Adjusted  $R^2 = .12$ ;  $F(13, 53) = 1.67$ ,  $p = .094$ ]. Step 1 was not significant, indicating that demographic variables thought to explain differences in depression were not significant correlates. Step 2 was significant, indicating that positive sexual identity explained significant additional variance [ $\Delta R^2 = .154$ ;  $\Delta F(1, 59) = 11.50$ ,  $p = .001$ ]. Income (a Step 1

variable) became significant with the addition of sexual identity, and as expected, positive sexual identity was negatively and significantly associated with depression,  $B (SE) = -.07 (.03), p = .029, \beta = -.27$ ;  $B (SE) = -.18 (.05), p = .001, \beta = -.41$  respectively. With the addition of measures of marital relationship quality, step 3 was not significant [Adjusted  $R^2 = .11$ ;  $F(10, 56) = 1.78, p = .086$ ], but income and positive sexual identity remained as significant predictors,  $B (SE) = -.07 (.03), p = .048, \beta = -.26$ ;  $B (SE) = -.18 (.05), p = .002, \beta = -.41$  respectively. Similarly, with the addition of measures of same-sex relationship quality in step 4, the model was not significant. The only significant predictor was positive sexual identity,  $B (SE) = -.19 (.06), p = .001, \beta = -.43$ . Thus, none of the measures of marital relationship quality and same-sex relationship quality were significant predictors of depression, suggesting that relationship qualities did not matter for sexual minority men's depression. Results for Step 4 are presented in Table 3.

**Life satisfaction.** Contrary to the hypothesis, results suggested that only income was a significant predictor of life satisfaction. The full model, inclusive of all 4 steps, was not significant [Adjusted  $R^2 = .08$ ;  $F(13, 54) = 1.43, p = .175$ ]. Step 1 was significant [Adjusted  $R^2 = .11$ ;  $F(6, 61) = 2.41, p = .037$ ], with income being the only significant predictor,  $B (SE) = .25 (.09), p = .007, \beta = .34$ . Step 2 was significant [Adjusted  $R^2 = .13$ ;  $F(7, 60) = 2.41, p = .030$ ], but the addition of positive sexual identity did not explain significant additional variance [ $\Delta R^2 = .03$ ;  $\Delta F(1, 60) = 2.18, p = .145$ ]. Income was the only significant predictor,  $B (SE) = .26 (.09), p = .005, \beta = .35$ . With the addition of measures of marital relationship quality, step 3 was not significant [Adjusted  $R^2 = .12$ ;  $F(10, 57) = 1.91, p = .063$ ], but income remained as a significant predictor,  $B (SE) = .25 (.09), p = .008, \beta = .34$ . Similarly, with the addition of measures of same-sex relationship quality in step 4, the model was not significant. The only significant predictor was income,  $B (SE) = .25 (.10), p = .016, \beta = .34$ . Therefore, positive sexual identity, marital

relationship qualities, and same-sex relationship qualities did not have significant associations with life satisfaction, suggesting that relationship qualities and sexual identity did not significantly contribute to life satisfaction of sexual minority men in mixed-orientation marriages. Results for Step 4 are presented in Table 4.

**Loneliness.** Results suggested that positive sexual identity and same-sex relationship satisfaction were significant predictors of participants' loneliness, whereas none of the measures of marital relationship quality were. The full model, inclusive of all 4 steps, was significant [Adjusted  $R^2 = .38$ ;  $F(13, 53) = 4.10$ ,  $p < .001$ ]. Step 1 was not significant, but income was a significant predictor,  $B (SE) = -.10 (.04)$ ,  $p = .021$ ,  $\beta = -.29$ . Step 2 was significant, indicating that positive sexual identity explained significant additional variance,  $\Delta R^2 = .166$ ;  $\Delta F(1, 59) = 14.76$ ,  $p < .001$ . Income was a significant predictor,  $B (SE) = -.10 (.04)$ ,  $p = .005$ ,  $\beta = -.33$ , and as expected, positive sexual identity was negatively and significantly associated with loneliness,  $B (SE) = -.23 (.06)$ ,  $p < .001$ ,  $\beta = -.43$ . The addition of measures of marital relationship quality in step 3 did not explain significant additional variance  $\Delta R^2 = .166$ ;  $\Delta F(1, 59) = 14.76$ ,  $p < .001$  [Adjusted  $R^2 = .07$ ;  $F(3, 56) = 2.21$ ,  $p = .097$ ], but the full step was significant [Adjusted  $R^2 = .30$ ;  $F(10, 56) = 3.85$ ,  $p = .001$ ], with income and positive sexual identity remained as significant predictors,  $B (SE) = -.10 (.04)$ ,  $p = .007$ ,  $\beta = -.32$ ;  $B (SE) = -.23 (.06)$ ,  $p < .001$ ,  $\beta = -.42$  respectively. Sexual orientation was also a significant predictor,  $B (SE) = -.33 (.16)$ ,  $p = .047$ ,  $\beta = -.23$ , suggesting that bisexual men reported significant less loneliness than gay men in this sample. Finally, the addition of measures of same-sex relationship quality in step 4 explained significant additional variance,  $\Delta R^2 = .094$ ;  $\Delta F(3, 53) = 3.31$ ,  $p = .027$ . Sexual orientation, positive sexual identity remained as significant predictors  $B (SE) = -.45 (.16)$ ,  $p = .006$ ,  $\beta = -.29$ ;  $B (SE) = -.26 (.06)$ ,  $p < .001$ ,  $\beta = -.48$  respectively, whereas income was not a significant

predictor anymore. Same-sex relationship satisfaction was significantly and negatively associated with loneliness  $B (SE) = -.15 (.05), p = .003, \beta = -.43$ , suggesting that higher satisfaction of same-sex relationship among sexual minority men in mixed-orientation marriages uniquely and significantly contributed to lower loneliness. Thus, whereas none of the measures of marital relationship quality were significant predictors of loneliness, positive sexual identity and same-sex relationship satisfaction were significantly and negatively associated with loneliness. Results for Step 4 are presented in Table 5.

## CHAPTER 4: DISCUSSION

The current study is the first to examine the well-being of sexual minority men in mixed-orientation marriages in China. Specifically, the current study uncovers the relative contributions of marital relationship quality, same-sex relationship quality, and sexual identity to Chinese sexual minority men's well-being. Consistent with previous research on gay men from Western industrialized countries (e.g., Meyer 2003), positive sexual identity in the current study was a significant predictor of depression and loneliness, highlighting the importance of the centrality of sexual identity for sexual minority men.

In this unique sample, men who were more comfortable with their sexual orientation (i.e., more positive sexual identity) were more likely to report lower levels of depression and loneliness but not necessarily higher life satisfaction. This has two implications. First, the significant associations between positive sexual identity and certain dimensions of mental health (i.e., depression and loneliness) would suggest that the extent to which sexual minority men are comfortable with their sexual orientation or have less internalization of societal stigma towards same-sex desire is of great importance for ameliorating their psychological maladjustment, even in marital contexts that are suppressive towards their sexual identity. Second, the insignificant association between positive sexual identity and life satisfaction might indicate that while positive sexual identity can help lower psychological maladjustment (i.e., depression and loneliness), it might be not enough for one to experience more positive psychological adjustment (i.e., higher life satisfaction). In fact, the sources of life satisfaction among sexual minority men might come from somewhere else, such as income, as shown in the current study. Similarly, a previous study on sexual minority young adults also reveals that educational attainment was a significant predictor of life satisfaction, whereas measures of sexual identity were not (Shao,

Chang, & Chen, 2018). Thus, future research should further examine how factors such as positive sexual identity might shape positive and negative aspects of psychological adjustment differently among sexual minority individuals.

Contrary to the hypothesis, there was no spillover effect between dimensions of marital relationship quality and same-sex relationship qualities. None of the measures of marital relationship quality were significantly correlated with measures of same-sex relationship quality. This might pinpoint the fact that sexual minority men usually keep marital relationship and same-sex relationship separate as a way to protect themselves when navigating a social world that is highly stigmatizing towards their sexual orientation. As Zheng (2015) noted, gay men in China manage their romantic relationships as if they were living in two worlds, such that they often keep their same-sex relationship private so that they could appear heterosexual to others. Despite the absence of spillover effects, of interest are the significant differences between correlations among measures of marital relationship quality and correlations among measures of same-sex relationship quality. The more robust correlations among measures of marital relationship quality (i.e., marital satisfaction, marital conflict, and marital commitment) than those among measures of same-sex relationship quality might reveal the difficulty for sexual minority men to have a stable same-sex relationship in the heteronormative Chinese society. Many men in this sample had significantly longer years of marital relationship than years of current same-sex relationship. Indeed, for most sexual minority men in mixed-orientation marriages, marriage would presumably persist regardless of whether their same-sex relationships continue or dissolve. Arguably, many of them might be aware that their same-sex relationships are highly fragile and most likely have no fruitful results.

Consistent with the hypothesis, none of the measures of marital relationship quality were significantly associated with mental health outcomes, whereas same-sex relationship satisfaction was significantly and negatively associated with loneliness. As it is intuitively obvious, most sexual minority men enter mixed-orientation marriage because of societal and familial pressure rather than their own wishes (Xing, 2012). As a result, qualities of marital relationship with their wives were not important for their well-being. Instead, the more they enjoyed their same-sex relationship, the less loneliness they would experience, which would suggest that a satisfied same-sex relationship for sexual minority men in mixed-orientation marriage can reduce feelings of loneliness. However, reverse causation is also possible here, such that those who reported lower level of loneliness might be more likely to experience satisfaction in their same-sex relationship. Therefore, future studies of sexual minority men can implement longitudinal design to test casual relations between these main variables.

This current study has some limitations. First, due to low visibility of this group of men, the current sample size is relatively small, which makes it harder to detect more complex effects of predictor variables. Second, selection bias is also possible in the current study. Considering that many sexual minority men in mixed-orientation marriage keep their same-sex relationship rather private to appear heterosexual (Xing, 2012), participants who completed the survey might already be more accepting towards their sexual orientation. On the other hand, however, it could also be that sexual minority men who are suffering in mixed-orientation marriages decide to join online organizations and support groups to cope. Thus, future studies could utilize in-depth interviews and ethnographic fieldwork to examine the ways in which sexual minority men in mixed-orientation marriages are qualitatively different from or similar to other groups of men. Despite these limitations, the current exploratory study showed that positive sexual identity and

same-sex relationship satisfaction were significantly associated with certain dimensions of mental health of sexual minority men in mixed-orientation marriages, whereas none of the measures of marital relationship quality were significant predictors. Indisputably, more research on this group of men and mixed-orientation marriages in general is needed. Future research should utilize larger sample size and longitudinal design to better examine factors that influence mental health outcomes of sexual minority men in mixed-orientation marriages.

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**Table 1***Descriptive Statistics and Correlations Among Main Variables*

	<i>M (SD)</i>	2	3	4	5	6	7	8	9	10
1. Positive sexual identity	2.99 (1.08)	-.04	-.01	-.13	-.12	.12	-.01	-.29*	.15	-.37***
2. Marital satisfaction	3.23 (1.57)	--	-.70***	.76***	.04	-.004	-.12	-.21	.21	-.29*
3. Marital conflict	3.09 (1.06)		--	-.54***	-.05	.11	.17	.16	-.23*	.22
4. Marital commitment	3.30 (1.19)			--	-.03	-.09	-.11	-.12	.20	-.16
5. SSR satisfaction	4.66 (1.64)				--	-.28*	.47***	-.05	.05	-.18
6. SSR conflict	2.13 (0.85)					--	-.22	-.17	.06	-.07
7. SSR commitment	4.15 (0.88)						--	.13	-.07	.07
8. Depression	2.07 (0.50)							--	-.31**	.58***
9. Life satisfaction	3.53 (1.34)								--	-.36***
10. Loneliness	2.54 (0.59)									--

*Note.* SSR = Same-sex relationship. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p \leq .001$ .

**Table 2***Correlations Among Dimensions of Relationship Qualities and Their Differences*

	Correlation coefficients		Z scores
	Marital relationship	Same-sex relationship	
Satisfaction vs conflict	-.70***	-.28*	-3.65***
Satisfaction vs commitment	.76***	.47***	2.99**
Commitment vs conflict	-.54***	-.22	-2.34*

*Note.* \* $p < .05$ ; \*\* $p < .01$ ; \*\*\*  $p \leq .001$ .

**Table 3***Hierarchical Linear Regression Predicting Depression*

	<i>b</i>	<i>SE</i>	$\beta$
Age	-.001	.02	-.02
Sexual orientation	-.12	.15	-.11
Income	-.05	.04	-.19
Educational attainment	.06	.05	.18
Years of marriage	.002	.02	.02
Years within current same-sex relationship	.00	.002	.02
Positive sexual identity	-.19	.06	-.43***
Marital satisfaction	-.03	.07	-.09
Marital conflict	.04	.08	.09
Marital commitment	.01	.08	.03
SSR satisfaction	-.08	.05	-.26
SSR conflict	-.09	.07	-.16
SSR commitment	.09	.08	.15
	Adj. $R^2$ for Step 1		-.037
	Adj. $R^2$ for Step 2		.118*
	Adj. $R^2$ for Step 3		.106
	Adj. $R^2$ for Step 4		.117
	$\Delta R^2$ from Step 1 to Step 2		.154***
	$\Delta R^2$ from Step 2 to Step 3		.030
	$\Delta R^2$ from Step 3 to Step 4		.050

Note. Results presented is Step 4 only. Step 1 included age, sexual orientation, income, educational attainment, years of marriage, and years of current same-sex relationship; Step 2 included positive sexual identity; Step 3 included marital satisfaction, marital conflict, marital commitment. Step 4 included same-sex relationship satisfaction, same-sex relationship conflict, and same-sex relationship commitment.  $*p < .05$ ;  $**p < .001$ .

**Table 4***Hierarchical Linear Regression Predicting Life Satisfaction*

	<i>b</i>	<i>SE</i>	$\beta$
Age	.05	.05	.27
Sexual orientation	.49	.43	.15
Income	.25	.10	.34*
Educational attainment	.02	.14	.03
Years of marriage	-.04	.04	-.24
Years within current same-sex relationships	.007	.006	.14
Positive sexual identity	.20	.16	.16
Marital satisfaction	.02	.19	.03
Marital conflict	-.22	.21	-.18
Marital commitment	-.04	.23	-.04
SSR satisfaction	.007	.14	.008
SSR conflict	.10	.20	.07
SSR commitment	-.05	.22	-.04
	Adj. $R^2$ for Step 1	.112*	
	Adj. $R^2$ for Step 2	.129*	
	Adj. $R^2$ for Step 3	.119	
	Adj. $R^2$ for Step 4	.078	
	$\Delta R^2$ from Step 1 to Step 2	.028	
	$\Delta R^2$ from Step 2 to Step 3	.031	
	$\Delta R^2$ from Step 3 to Step 4	.006	

Note. Results presented is Step 4 only. Step 1 included age, sexual orientation, income, educational attainment, years of marriage, and years of current same-sex relationship; Step 2 included positive sexual identity; Step 3 included marital satisfaction, marital conflict, marital commitment. Step 4 included same-sex relationship satisfaction, same-sex relationship conflict, and same-sex relationship commitment.  $*p < .05$ .

**Table 5***Hierarchical Linear Regression Predicting Loneliness*

	<i>b</i>	<i>SE</i>	$\beta$
Age	.03	.02	.37
Sexual orientation	-.45	.16	-.32**
Income	-.07	.04	-.20
Educational attainment	.10	.05	.23
Years of marriage	-.02	.02	-.29
Years within current same-sex relationships	-.002	.002	-.11
Positive sexual identity	-.26	.06	-.48***
Marital satisfaction	-.09	.07	-.23
Marital conflict	.04	.08	.07
Marital commitment	.08	.08	.16
SSR satisfaction	-.15	.05	-.42**
SSR conflict	-.09	.07	-.14
SSR commitment	.13	.08	.20
	Adj. $R^2$ for Step 1	.089	
	Adj. $R^2$ for Step 2	.259***	
	Adj. $R^2$ for Step 3	.302***	
	Adj. $R^2$ for Step 4	.379***	
	$\Delta R^2$ from Step 1 to Step 2	.166***	
	$\Delta R^2$ from Step 2 to Step 3	.070	
	$\Delta R^2$ from Step 3 to Step 4	.094*	

Note. Results presented is Step 4 only. Step 1 included age, sexual orientation, income, educational attainment, years of marriage, and years of current same-sex relationship; Step 2 included positive sexual identity; Step 3 included marital satisfaction, marital conflict, marital commitment. Step 4 included same-sex relationship satisfaction, same-sex relationship conflict, and same-sex relationship commitment.  $*p < .05$ ;  $**p < .01$ ;  $***p \leq .001$ .