


Marriage Aspiration, Perceived Marriage Squeeze, and Anomie Among Unmarried Rural Male Migrant Workers in China

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Abstract

Using data from a survey of rural–urban migrants conducted in Xiamen City, China, during 2009, this study explores determinants of anomie among unmarried rural male migrant workers in the context of China's gender imbalance. Results indicate that the perceived marriage squeeze has exerted direct effects on anomie, and marriage aspiration has indirect effects on anomie among rural male migrant workers. The perceived marriage squeeze also has a mediating effect between marriage aspiration and anomie among unmarried rural male migrant workers. Social integration in the destination city is also a determinant of anomie among these unmarried migrant workers.

Keywords

marriage aspiration, marriage squeeze, anomie, gender imbalance, psychological well-being

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An accumulation of empirical studies on the relationship between marital status and psychological well-being in Western societies has provided evidence supporting a positive relationship between marital status and psychological well-being. Married individuals are better off than unmarried individuals on several dimensions of health (Campbell, Converse, & Rodgers, 1976; Glenn & Weaver, 1988; Schoenborn, 2004), and marriage can improve psychological well-being (LaPierre, 2009; Manzoli, Villari, Pirone, & Boccia, 2007; Seeman & Crimmins, 2006). Other studies have challenged these findings (Gove, Hughes, & Style, 1983; Murata, Kondo, Ojima, & Saito, 2007; Williams & Umberson, 2004) and have suggested that it is the quality of marriage, rather than marriage itself, that is associated with psychological well-being (Gove et al., 1983). Marital resource theory has been offered as an explanation for the finding that married individuals are more likely to be healthier than unmarried individuals. According to this theory, marriage provides access to material and emotional resources (Robles & Kiecolt-Glaser, 2003), which enhance the ability to adapt to stressful events and enhances self-coping ability (Cohen & Willis, 1985). Being unmarried is often associated with increased risk of mental problems due to lack of

financial, emotional, physical, and instrumental support (Jang et al., 2009; Umberson, Wortman, & Kessler, 1992), which can lead to stressful situations and emotional distress (Goldman, Korenman, & Weinstein, 1995; Kessler, 1979).

The bulk of these findings about the relationship between marital status and mental health refers to Western societies. Few studies have been conducted in Asian societies (Jang et al., 2009) such as China. Chinese society differs from Western societies not only culturally but also in being in the midst of social transition (Li, Li, & Feldman, 2015). Gender imbalance and population

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migration are the two important and unusual sociodemographic characteristics of China. The gender imbalance in China has produced a large surplus of males in the marriage market. Literature estimates that in China's population there are about 33 million surplus men (Xu & Li, 2015), most of whom are likely to confront a squeeze in the marriage market (Li, Jiang, Attané, & Feldman, 2006). Population migration is another important sociodemographic phenomenon. There are more than 247 million migrant workers in China, most of whom are rural-urban migrants (Li, 2018). Because of the system of household registration (*hukou*), the majority of rural migrant workers have not only been prevented from taking up permanent residence in cities, but have also been pushed into highly labor-intensive and low-wage jobs, and have been isolated at marginal locations in the cities (Li & Li, 2017). These negative migration experiences might lead to at least two deleterious consequences. The first is emotional isolation, which is associated with the exposure to such stressors as social isolation and work instability. The second is the serious marriage squeeze, which is related to the gender difference in migration. Women tend to marry men who are better educated, and higher earning than they are (Ehrenreich & Hochschild, 2004), which leads women to employ marriage as a strategy to improve their social status (Fan & Huang, 1998; Riley & Gardner, 1993). Marriage migration is a way for single rural females to be upwardly mobile, by marrying men in more developed regions (Fan & Huang, 1998); this makes the gender imbalance worse in the poor rural areas. By contrast, there are very few ways for rural male migrants to get urban *hukou* (household registration) and change their social status. Many of them must return to their original villages to seek marriage opportunities (Li, 2016), and are then involved in a more serious marriage squeeze due to gender imbalance and female marriage migration. In the other words, unmarried rural migrant workers suffer from the double deprivation of marriage and their socioeconomic status in the context of gender imbalance and population migration.

The marriage squeeze has been widely recognized as an alarming issue in China (Eklund, 2013; Yang, Attané, Li, & Yang, 2012), and has attracted the attention of many scholars (Merli & Hertog, 2010; Shuzhuo, Qunlin, Xueyan, & Attané, 2010; Yang et al., 2012; Yang, Li, Attané, & Feldman, 2017). Some studies on male bachelors' psychological well-being have been conducted using qualitative methods (Li & Li, 2008; Wei, Jin, & Li, 2008; Zhou, Wang, Li, & Hesketh, 2011). These studies converge in reporting that male bachelors share the following problems: low socioeconomic status, shortage of social support, and limited marriage opportunities. As a result, they not only face multiple stressors that result from the marriage squeeze (Li & Li, 2008; Li, Li, & Peng, 2009;

Wei et al., 2008), but are at high risk of developing poor psychological well-being (Zhou et al., 2011). These previous studies mainly focused on describing the psychological stressors, or discussing from a structural perspective the relation between gender imbalance and psychological well-being among male bachelors. How the marriage squeeze causes psychological health problems has been given little attention. Meanwhile, most of these studies focus on general features of psychological well-being, such as the prevalence of depression, but neglect unmarried rural migrant workers' individual anomie. This anomie is a psychological state related to psychological well-being but different from general psychological health that is described in related literature. Srole (1965) suggested that individual anomie is an indicator of psychiatric disorders, while other studies find that high levels of anomie may have negative effects on adult health (Fisher, 1988; Freidl, 1997).

The marriage squeeze due to gender imbalance entails that many surplus males have their path to marriage blocked, and then makes surplus males fail to marry at their marriageable age, and many, with low socioeconomic status, will fail to ever marry. The result resembles Merton's anomie in that there is disharmony between a goal and the means to attain it. Meanwhile, being single not only means that an unmarried male's regular life is restricted but that he also fails to fill many normal adult roles. In turn, this might lead him to depart from accepted social norms. In addition, failing to marry also would result in being labeled as a bachelor by other people, and this classification can not only lead to social isolation, but undermine the unmarried males' self-identity, which would lead to anomie.

The goals of getting married and achieving economic success are hindered by gender imbalance and population migration. The Chinese universal marriage culture remains in place, which traps the unmarried rural migrant workers in a disjunction between goals and means. Merton's anomie is an appropriate avenue to explore the personal attitudinal anomie among unmarried males. This study aims to delineate how marriage aspirations and the marriage squeeze influence anomie in individual unmarried males in the context of gender imbalance and population migration. In the gender-imbalanced marriage market, whoever anticipates marrying, whatever his age, must face the risk of being in trouble if he lacks the opportunity to choose a mate. The present study expands the research objective from just older unmarried males to all unmarried males entering the marriage market.

Although findings from this study are largely consistent with the bachelor health literature, we return to anomie theory, and call attention to the individual anomie that is related to psychological well-being, but also different from the usual mental health status. Further, we argue

that exploring the relationship between the marriage squeeze and individual anomie among unmarried male migrants not only helps us understand the influence of impediments caused by gender imbalance and population migration to unmarried males' chances of a normal life. It will also contribute to discussions of gender imbalance and masculinity. In addition, individual anomie as a psychological state is treated as a psychological resource (Freidl, 1997), and believed to influence a person's social participation (Fisher, 1988), both of which are associated with a person's health. Thus, studying unmarried males' anomie also contributes to understanding unmarried males' health status in the context of gender imbalance and population migration.

Theoretical Framework

Drawing upon Durkheim's anomie, Merton presented his theory of anomie, and defined anomie as the dissociation between cultural goals and institutional norms (Merton, 1968). "Structural anomie" refers to the condition in which society places greater stress on achieving culturally preferred goals, but does not equally emphasize the institutionalized means to achieve those goals (Rhodes, 1964). At the socio-psychological level, Merton also advanced his strain theory to explain how individuals adjust to a social state of anomie (Featherstone & Deflem, 2003). He claimed that under the condition of anomie, the perceived conflict between cultural goals and institutional means would result in strain at the individual level (Merton, 1968). In order to deal with this strain, individuals have five ways to adapt, namely adaptation, innovation, rebellion, ritualism, and retreatism. Indeed, the central aspect of Merton's anomie is not limited opportunity for success, but rather the culturally induced pressure to be successful (Orrù, 1987). Although Merton introduces individual anomie, he does not specifically define it. An individual's degree of anomie is defined by Srole (1956) as a state of mind, which refers to the social malintegration between the individual and society and lack of both self-identification and social identification.

A number of studies employ Srole's anomie scale (Srole, 1956), or Dean's (1961) normlessness scale to measure individual anomie, and examine the relationship between socioeconomic status and individual anomie. Most of these studies have supported anomie theory in finding that people of low social status are more likely to have high anomie (Meier & Bell, 1959; Mizruchi, 1960; Killian & Grigg, 1962; Srole 1956; Wendell, 1957). Some studies, however, fail to corroborate the theory, "since class difference in deviance may not be systematically related to discrepancies between individual aspirations and perceived opportunity" (Rushing, 1971, p. 858). Rhodes (1964, pp. 435) commented that "many of these

studies ignore Merton's original formulation in which he specifies that conformity is by far the most common adaptation to this structurally induced stress." He invoked aspiration to explain the relationship between anomie and low socioeconomic status, and identified that anomie was more closely related to occupational aspiration than to occupation level; anomie results from the discrepancy between aspiration and chance for success provided by the family's position in the social structure.

Other literature criticizes the classic anomie theory from different perspectives. The major criticism is that "the disjunction between goals and means, which is claimed to underlie anomie, has most commonly been interpreted in socio-economic terms" (Lee, 1974) or "blockage of goal-seeking" (Agnew, 1985). Finestone (1976, p. 166) believes that some authors fail to understand Merton's anomie, and suggests that it should be regarded as a disjunction between universal American goals and lack of access to these goals. Lee (1974) suggests that the disjunction between goals and means need not be restricted to the economic sphere. She claims that the goal of marital success is also regarded by American culture as economic success, but the motivation for marriage is largely the expectation for gratification of psychological or emotional needs. If economic frustration produces anomie, marital frustration may also do so. Lee's findings not only open anomie theory to a wider range than only socioeconomic variables (Ryan, 1981), but also point to the cultural marriage goal as marital happiness at the individual level. Agnew (2006) broadens the definition of strain (individual anomie) to include any events or conditions that are disliked by individuals. Such strain not only involves goal blockage, but involves the loss of positively valued stimuli and the presentation of negatively valued stimuli (Agnew, 2006; Aseltine, Gore, & Gordon, 2000). Examples include the loss of a boyfriend or girlfriend, and all kinds of stressful life events (Agnew & White, 1992); it is the strain that creates internal pressure to produce the delinquency of anomie (Agnew, 1995).

Like marital success in American culture, which parallels Merton's economic success, getting married is not only a life goal but also a family obligation, which is emphasized in Chinese traditional Confucian culture. Being in a heterosexual relationship and getting married is seen as a cultural norm in East Asian society (Lin, 2016); "marriage is still almost universal and the idea that 'everybody should get married' is widely prevalent" (Yang et al., 2012). China's gender imbalance and population migration have produced a surplus of males in the marriage market, and forced some adult unmarried male migrants into a series of strains. On the one hand, the unmarried male migrants would suffer a double squeeze because of gender imbalance and the household

registration system. Gender imbalance can block these paths to marriage for these surplus men, and then lead to their frustration. Population migration is another risk factor that would reduce these unmarried males' marriage opportunities. Because of their exclusion from the household registration system, migrant workers have no access to welfare that is sponsored by local governments, and must perform insecure, poorly paid, and low-welfare work (Li et al., 2015), which causes some of them not only to fail to achieve their breadwinner role but also to be unable to afford their marriage expenses, both of which are likely to reduce their marriage opportunities.

On the other hand, experiencing marriage squeeze might undermine the unmarried male migrant's masculinity and lead to social isolation. In the Chinese patriarchal culture, marriage is a core institutional part of the family system and plays a crucial role in ensuring family continuation (Fei, 1998). Achieving marriage not only confers on an individual honor and prestige (Li & Chen, 1993), but involves family continuation and family honor. Bachelors may experience social stigma (Kong, 2011), being labeled as without "ben shi" or "neng li" (capability; Lin, 2016). Such single men would be regarded as outside the category of heterosexual adult males (Lin, 2016), and be treated as not fully adult or masculine (Ehrenreich, 1983). This stigmatization not only leads the unmarried male to be ostracized by the other group but determines his self-identity, which leads to self-segregation. In all, bachelor status not only entails loss of prestige or status, but brings shame upon the bachelor's family, and may result in discrimination by the community, both of which make them suffer frustration and stresses, erode their self-esteem and social integration, and result in anomie, disappointment, and a sense of uselessness (Wei et al., 2008). Therefore, the first hypothesis is proposed:

Hypothesis 1. The perceived marriage squeeze has a significant influence on anomie among unmarried rural male migrant workers.

Marriage aspiration is another important factor that affects anomie of unmarried male migrant workers. The motivation to marry is a precondition for the marriage squeeze to exert an influence on unmarried males. On the individual level, gender imbalance in the marriage market promotes serious competition for mating opportunities, which in the context of universal marriage culture might generate high aspiration to marry among unmarried males.

High aspiration is believed to be indicative of a strong commitment to conventional order (Hirschi, 1969). Although conformity with the culture of universal

marriage may motivate unmarried males to seek mating opportunities, it is likely to frustrate them in the presence of gender imbalance. Unmarried males with high marriage aspiration are likely to be more sensitive to the marriage squeeze, and more anxious when they sense the marriage squeeze than unmarried males with low marriage aspiration. At the same time, the conflict between marriage aspiration and marriage squeeze is likely to be more serious among unmarried males with high marriage aspiration than those with low marriage aspiration. Therefore, unmarried males with high aspiration to marry are likely to experience high levels of frustration and stress, which then lead to anomie. The second hypothesis is proposed:

Hypothesis 2. Marriage aspiration can influence anomie through the mediating effect of the perceived marriage squeeze among unmarried rural male migrant workers.

As well as the marriage squeeze, which emerges from gender imbalance; some migration experiences may have important effects on unmarried rural male migrant workers. Adaptation is a determinant of psychological well-being among migrant workers and is related to the migration process. Research has reported that there is a time effect in the urban adaptive process; immigrants' mental health is highly vulnerable in the early stages (1-2 years after immigration), and their mental well-being improves with length of residence (Hurh & Kim, 1990; Zhang & Tong 2006). Unemployment and under-employment not only result in financial strain (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Warr, 1987), but also in social isolation (Jahoda, 1982), and relative social deprivation. Because of their *hukou*, most migrant workers are forced into unstable and low-wage jobs (Li et al., 2015), which reduces their social support resources, and makes them highly vulnerable to strain events (Winkelmann, 2009). A robust relationship between social support and health has been observed in many empirical studies (Brown, Nesse, Vinokur, & Smith, 2003). Social participation in the destination city is an important source of social support, and also the main way to integrate into that city. Therefore, for unmarried rural male migrant workers, their migration experiences and social integration in the destination city should have important effects on their urban adaptation, and on their anomie.

If the logic of anomie strain is correct, there is a reason to expect the worry incurred by the difficulty of marrying to have a direct effect on individual anomie among these migrants. We also expect marriage aspiration to have an indirect effect on individual anomie through the sense of marriage difficulty. These connections are summarized in the diagram in Figure 1.

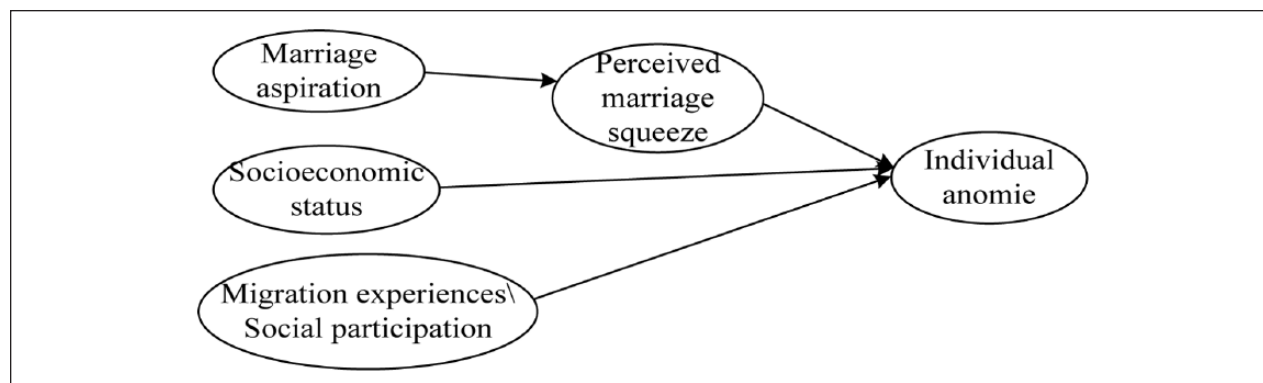


Figure 1. Framework for anomie among unmarried rural male migrant workers.

Data and Methods

Data

The data analyzed in this study come from the survey “Rural-Urban Migrants Study in Y district, X City, Fujian Province, China,” in early November 2009, carried out by the Institute for Population and Development Studies, Xi’an Jiaotong University (see Yue, Li, Feldman, & Du, 2010, for details). X City is one of China’s earliest Special Economic Zones on the southeastern coast and has the highest proportion of immigrants not only in Fujian province, but in China. According to the “Blue Book of Migrant Populations Social Integration 2019,” more than 2.21 million immigrants were living in X City in 2017. Descriptive statistics for place of origin show that migrants from 29 out of 32 provinces, autonomous regions, and municipalities directly under the Central Government in China. Most of the migrants in X City come from the southern and central provinces with strong son preference culture and high sex ratio at birth (SRB), such as Fujian, Jiangxi, Sichuan, Hubei, Anhui, Henan, and Hunan.¹ These provinces make up 90.61% of the migrants in X City. Y District, one of X City’s six districts, is the heart of X City and is the city’s center for commerce, science, education, sports, tourism, and culture. According to the statistical yearbook of The People’s Government of Y District, Y District had a population of 0.71 million in 2008, of whom 72.41% were immigrants (rural–urban migrants are the majority). Thus, X City is a good study site, and Y District is an excellent example of the rural–urban migrants’ receiving areas in China.

The high migration frequency and living arrangements of migrant workers also prevent us from using a sampling frame and random sampling. In order to increase sample’s representativeness and diversity, and to cover all typical occupations engaged in by rural–urban migrants, a loose quota sampling method and cluster sampling technique were used. First, by using such criteria as sex, age, marital status, five survey groups were constructed

(married male, unmarried male aged 27 and below, unmarried male aged 28 and above, married female, and unmarried female). To ensure all survey groups containing individuals from different age groups, we predetermined the minimum sample size of each group to be 200. Thus, this survey collected relatively large size and diversity sample of unmarried males. Second, in order to represent migrants from different industries, the survey also considers industry as one of the sampling criteria. Third, according to rural migrants’ housing arrangements, two clusters were constructed: concentrated-housing migrants and scattered-housing migrants. The former live in dormitories or work sheds provided by their employers. The latter live in communities, and their places of residence are mostly rented. Lastly, according to the sampling criteria mentioned previously, we sampled from the two clusters in all five subdistricts of Y District in both enterprises and communities.

The subjects are rural–urban migrants aged 16 and above with agricultural *hukou* (residence permit). The predetermined sample size was 1,500, of whom 500 were concentrated-housing migrants and 1,000 were scattered-housing migrants. Actually we obtained 1,507 respondents of whom 59.65% were male, 35% aged 16 to 24, 43% aged 25 to 34, and 22% aged 35 and above. Further, 46.38% were married, 16% were self-employed, 37% worked in manufacturing industries, 32% in the service industry, 9% in the construction industry, and 6% in other jobs. The age distribution, sex distribution, and some typical industries of this sample are roughly identical to the age structures of migrant worker in the 2009 Survey Report on the Migrant Workers,² which was issued by National Bureau of Statistics in China. Unmarried male respondents totaled 523, and 24.4% had missing values of whom 88.28% were missing the variable anomie. We deleted the cases with the missing value on the anomie variable and built a new database. Using the raw data and working data separately, we used descriptive statistics for the independent variables age, marriage aspiration, and

marriage difficulty. There are no significant differences between the two types of data (see Appendix A), which means that values missing are random and there is no pattern in the missing data with respect to the main variables. Further, multiple regression is used to estimate missing values on anomie; the dependent variable is anomie, and independent variables are the same as the independent and control variables in this study. We then use the fitted values to replace missing values for anomie. Finally, using the fitted data, multiple regression is employed to estimate the effects of the independent variables on the dependent variable; the results of the model are similar to the results of the model that uses the working data (see Appendix B). Therefore, in this study we use the working data, a sample totaling 410.

The nonprobability sampling method produces bias in our data, which restricts our ability to generalize our findings. However, given the relatively large size and diversity of the sample, this data should still be appropriate for association analyses at the cost of detailed accuracy. On the other hand, although the data were collected through a nonrandom sampling approach, they provided an important channel for further developing the studies on bachelors. Existing studies mainly focused on describing male bachelors' general psychological problem. In addition, they seldom addressed bachelors' anomie that is related to psychological well-being but different from common mental health disorder. Lastly, none of the studies examined the relationship between marriage squeeze and anomie quantitatively. The respondents reported their marriage aspiration, perceived marriage squeeze, and anomie in a face-to-face survey. Thus, the data will help to further understand the consequences of the resulting gender imbalance, including anomie, marriage aspiration, perceived marriage squeeze, and their relationship.

Measures

Anomie was the dependent variable in the models. Marriage aspiration and perceived marriage squeeze were included as independent variables in the models. Socioeconomic status (occupation, education, and income), age, migration experience (employment status, relative deprivation, formal organization participation, and informal organization participation) were included as control variables in the models. The following describes the definition of each measure.

1. The dependent variable was anomie. The margins of society (MOS) alienation scale, which is constructed on the theory of anomie and social isolation, is a seven-item relative superiority scale that assesses the current level of anomie at the individual level. Compared with Srole's scale, the

MOS scale "is not only quite reliable, but also possesses a high degree of criterion" (Travis, 1992, p87). Respondents were asked whether they agreed with, "feel all alone these days; feel discriminated against; my whole world is falling apart; wish I were somebody important; hard to tell right and wrong; don't like to live by society's rules; never find the right person to care enough about me." Responses were coded from 1 to 5. Anomie scores are the sum of the responses on all seven items, ranging from 7 (minimum anomie) to 35 (maximum anomie). The higher the respondent's score, the more serious is his anomie. Cronbach's α test shows that scale reliability coefficient is 0.8975.

In China, rural-urban male migrant workers are marginalized people, not only in their group identity but also in their cultural identity within the urban-rural dual social structure. Rural-urban male migrant workers drift between rural and urban identities, between tradition and modernity; the traditional habit gradually blurs, or even collapses, but the new habits are not yet established, so they tend to feel spiritual conflict and instability. In this process, they are more likely to experience a feeling of social isolation, which is why the MOS alienation scale was employed to measure anomie.

2. Independent variables that were incorporated into the analyses include marriage aspiration and perceived marriage squeeze.

Marriage aspiration. Marriage aspiration is measured by the degree of marriage urgency, which includes "don't plan to get married," "hope to get married moderately," "hope to get married urgently," we combine "don't plan to get married," "hope to get married moderately" together and call it "other," with "other" as the contrast category.

Perceived marriage squeeze. The existing literature often regards lack of marriage opportunity as the result of the marriage squeeze. However, this view is out of touch with reality. The behavior of seeking a spouse is often associated with spouse preference and characteristics. Although the marriage squeeze would cause some unmarried males to have difficulty in marrying, some unmarried males would try to find a mate by changing their preferences. For example, marrying an older woman or disabled woman is a regular strategy for "marriage-squeezed" male bachelors. That is to say, the marriage squeeze not only deprives some unmarried males of marriage opportunities, but also lowers the rate of marrying a suitable (or ideal) spouse. Lacking opportunities to seek a suitable spouse also may lead the unmarried person to encounter difficulties in making his

ideal marriage. Thus, both of the above force the unmarried male to encounter different levels of marriage difficulty due to the marriage squeeze. Further, the marriage squeeze is not only the result of gender imbalance in the marriage market, but also a consequence of social stratification. Low socio-demographic status and the female marriage gradient make it difficult for some single men to find a spouse. Even in a gender-balanced marriage market, some unmarried males with low socioeconomic status or less desirable personal characteristics would experience the marriage squeeze due to the female marriage gradient. That is to say, the gender imbalance not only reduces marriage opportunities for unmarried males of low socioeconomic status, but increases the likelihood that unmarried males will experience the marriage squeeze. These difficulties may extend beyond objective perception of the marriage-matching numbers; perception of the marriage squeeze may also increase an individual's difficulty in marrying. Thus, this study employs difficulty of marriage to measure the marriage squeeze, and measures the perceived marriage squeeze through the respondents' reports of whether they have encountered or are encountering difficulty in marrying. Responses were "yes" or "no."

3. The following control variables were controlled throughout the analysis: socioeconomic status, health status, age, migration experience, relative deprivation.

Socioeconomic status. Three types of potential social status variables were considered: occupation, education, and income. Occupation is classified into three categories: blue-collar worker, managerial and technical staff, and propertied class. Education is classified into three categories: elementary school, secondary or high school, college. Income is measured as the respondent's monthly total income.

The relationship between marital status and anomie may be a function of health status (Gove et al., 1983). People who are emotionally unstable or physically handicapped are unlikely to get married, and if they do marry are unlikely or unable to stay married (Martin, 1976). Self-reported health was used to measure health status, which includes two categories: good and fair/poor.

Age is measured in years. In interviews, if a man is aged 28 and above and is single, he would encounter great difficulty in getting married. If he is aged 40 or above and still single, he would give up marriage aspiration in a rural area. Thus, this article classified age into three categories: aged 27 and below, aged from 28 to 39, and aged 40 and above.

Migration experience. Migration experience was divided into two categories: migration time and relative deprivation. Immigrants' mental health is highly vulnerable in

the early stages (1–2 years after immigration; Hurh & Kim, 1990). This study classified migration time into two categories: short (migration time less than 2 years) and long (migration time more than 2 years).

Employment status. According to the legal working hours in China, employment status was classified into two categories: inadequate employment (weekly working time less than 5 days) and full employment (weekly working time no less than 5 days).

Relative deprivation. This study constructs a short relative deprivation scale which comprises two dimensions: socioeconomic status and marriage. Relative deprivation is a four-item scale that assesses an individual's current level of relative deprivation. Respondents were asked to rate, compared to their peer migrant male workers, "the difficulty of dating the opposite sex; attraction to opposite sex; personal economic conditions; parents' economic conditions." Responses were coded from 1 to 5. Relative deprivation is the sum of the responses on all four items, ranging from 4 to 20. The higher a respondent's score, the lower is his relative deprivation.

Social participation, social support, and social integration are all beneficial to psychological well-being (Lin, Ensel, Simeone, & Kuo, 1979; Thoits, 1982). Previous literature has often employed marriage status (Eaton, 1978), social participation (Lin et al., 1979), and relationships with friends (Wellman, 1981) to measure social support. Here we consider two types of potential social participation: participation in a formal organization and informal community participation. Formal organization participation and informal community participation both include two categories each: yes and no.

The descriptive statistics are in Table 1.

Statistical Strategy

In order to assess relationships among marriage aspiration, perceived marriage squeeze, and anomie, this study first analyzed all the variables and the difference in anomie between married male migrant workers and unmarried male migrant workers. Then, multiple linear regression was used to evaluate the effects of the following independent variables: marriage aspiration and perceived marriage squeeze. The control variables included: age, health, occupation, income, education, formal organization participation, informal organization participation, migration time, employment status, and relative deprivation. To further explore determinants of anomie among unmarried male migrant workers, we used the Sobel–Goodman test (Sobel, 1982) to test the relationships between marriage aspiration, marriage

Table 1. Descriptive Statistics of Independent Variables ($N = 410$).

Variables	Sample	Variables	Sample
Anomie <i>M/SE</i>	19.52/6.00	Income <i>M/SE</i>	2050/93
Marriage aspiration, %		Education, %	
Hope to get married urgently	11.92	Elementary school	3.80
Other	88.08	Secondary or high school	80.25
Perceived marriage squeeze, %		College	15.95
Perceive marital difficulty	31.90	Social participation	
Don't perceive marital difficulty	68.10	Formal organization participation, %	
Individual factors		Yes	16.71
Age, %		No	83.29
Below 27	60.25	Informal community participation, %	
28–39	37.72	Yes	47.34
Above 40	2.03	No	52.66
Health, %		Migration experience	
Fair/poor	96.46	Migration time, %	
Good	3.54	Short	29.11
Social-economic status		Long	70.89
Occupation, %		Employment status, %	
Blue-collar worker	84.05	Full employment	98.23
Managerial and technical staff	8.86	Underemployment	1.77
Propertied class	7.09	Relative deprivation <i>M/SE</i>	11.95/1.40

Note. Source: Data from the X City, Fujian Survey of rural–urban migrants. The first category in the categorical variable is the reference item. *M/SE* = Mean/Standard Err.

squeeze, and anomie among unmarried male migrant workers.

To estimate the relationship between marriage aspiration, marriage squeeze, and anomie, this study constructed six linear regression models. In the first part of the analysis, model 1 and model 2 treat marriage aspiration and marriage squeeze separately; model 3 includes marriage squeeze and control variables to estimate the effect of the independent variables, Model 4 includes the independent variable of marriage aspiration as well as control variables. From these four models, this article obtains rough estimates of the separate effects of independent variables.

Models 4, 5, and 6 allow mediation analysis. Model 4 includes the dependent variable of anomie, independent variables of marriage aspiration, and control variables; model 5 includes the dependent variable of marriage squeeze and independent variables of marriage aspirations and control variables. Model 6 includes the dependent variable of anomie, and all the independent and control variables.

Results

Table 2 reveals the difference in anomie between married and unmarried males. There is a significant difference in anomie between married and unmarried males; unmarried males have significantly higher anomie than married males.

Table 2. Difference in Anomie by Marital Status Among Male Migrant Workers.

Marital status	Mean/ <i>SD</i>	<i>N</i>	<i>F</i>
Married	15.99 (4.73)	329	***
Unmarried	19.52 (6.00)	410	

Note. *** $p < .001$.

Descriptive statistics for other independent variables by marriage aspiration and perceived marital difficulty are presented in Table 3. There is a positive relationship between age and marriage aspiration, and age also has a positive association with perceived marriage difficulty. The rates of urgent marriage aspiration and perceived marriage difficulty increase with age, indicating that increasing age not only motivates unmarried males' marriage aspiration, but could reduce their marriage opportunities. Second, unmarried males with fair or poor health have higher rates of urgent marriage aspiration and perceived marriage difficulty than unmarried males with good health, suggesting that health status also affects unmarried male's marriage opportunities. Third, unmarried males with only elementary school education also have higher rates of urgent marriage aspiration and perceived marriage difficulty, but unmarried males with higher education also have a high rate of perceived marriage difficulty. Thus, although education appears to

Table 3. Descriptive Statistics for All Variables by Marriage Aspiration and Perceived Marriage Difficulty ($N = 410$).

		Marriage aspiration				Perceive marital difficult	
		Other	Urgently			No	Yes
Age	Below 27	92.86	7.14	Age	Below 27	81.09	18.91
	28–39	77.18	22.82		28–39	49.66	50.34
	Above 40	75.00	25.00		Above 40	25.00	75.00
Health	Good	87.14	12.86	Health	Good	69.03	30.97
	Fair/poor	71.43	28.57		Fair/poor	42.86	57.14
Relative deprivation	Relative deprivation	12.04	11.37	Relative deprivation	Relative deprivation	12.15	11.53
Education	Elementary school	73.33	26.67	Education	Elementary school	46.67	53.33
	Secondary/high school	86.12	13.88		Secondary or high school	70.66	29.34
	College	92.06	7.94		College	60.32	39.68
Income	Log-Income	7.48	7.53	Log-Income	Income	7.47	7.53
Occupation	Blue-collar worker	86.14	13.86	Occupation	Blue-collar worker	67.47	32.53
	Managerial/technical staff	82.86	17.14		Managerial/technical staff	77.14	22.86
	Propertied class	96.43	3.57		Propertied class	64.29	35.71
Employment status	Underemployment	100	0	Employment status	Underemployment	42.86	57.14
	Full employment	86.34	13.66		Full employment	68.56	31.44
Informal community participation	Yes	83.96	16.04	Informal community participation	Yes	66.84	33.16
	No	88.94	11.06		No	69.23	30.77
Formal organization participation	Yes	81.82	18.18	Formal organization participation	Yes	69.70	30.30
	No	87.54	12.46		No	67.78	32.22

Table 4. Difference in Perceived Marriage Difficulty by Marriage Aspiration ($N = 410$).

Marriage aspiration	Marriage squeeze		Pr
	Difficulty	No	
Urgently	65.45	34.55	***
Other	26.86	73.14	

Note. *** $p < .001$. Pr = significance of Pearson χ^2 (Pr = 0.000).

affect unmarried males' marriage opportunities, the mechanism is complex. Fourth, unmarried males who are underemployed have a higher rate of perceived marriage difficulty, indicating that employment status also shapes unmarried males' marriage opportunities.

Table 4 shows the difference by marriage aspiration in marriage difficulty among unmarried male migrant workers. Unmarried males with urgent marriage aspiration have a higher rate of perceived marriage difficulty than those with low or middle levels of marriage aspiration. Thus, there is significant difference in marriage difficulty according to the level of marriage aspiration.

Table 5 presents the effects of the independent variables and control variables on anomie. First, this study examines the rough effects of the independent variables using models 1 and 2, and finds that the two independent variables make significant contributions to anomie.

Compared to “don't plan to get married or hope to get married moderately,” “hope to get married urgently” increases the level of anomie significantly ($r = 1.94$; $p < .05$); compared to “don't perceive marital difficulty,” “perceive marital difficulty” increases the level of anomie significantly ($r = 3.04$; $p < .001$).

Model 3 includes the independent variable of marriage squeeze and control variables. The results show that the association between marriage squeeze and anomie remains significant ($r = 2.74$; $p < .001$). Model 4 includes the independent variable of marriage aspiration and control variables, and again marriage aspiration has a significant effect on anomie ($r = 1.96$; $p < .05$). Thus, marriage aspiration and marriage squeeze have significant effects on anomie, and “hope to get married urgently” and “perceived married difficulty” significantly increase the level of anomie among unmarried male migrant workers. The results support Hypothesis 1.

Models 4, 5, and 6 incorporate mediation analysis. For Model 4, the independent variable of marriage aspiration has a significant effect on anomie among unmarried male migrant workers ($r = 1.96$; $p < .05$). For Model 5, the independent variable marriage aspiration also has a significant effect on the mediating variable of marriage squeeze ($r = 0.25$; $p < .001$). Model 6 includes the independent variable marriage aspiration, mediating variable marriage squeeze, and control variables. We find that the independent variable of marriage aspiration has no

Table 5. Regression of Anomie on Marriage Aspiration and Perceived Marriage Squeeze.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Marriage aspiration						
Hope to get married urgently	1.94*			1.96*	0.25***	1.33
	0.87			(0.91)	(0.07)	(0.91)
Perceived marriage squeeze						
Perceive marital difficulty		3.04***	2.74***			2.55***
		0.63	(0.69)			(0.70)
Individual factors						
Age						
28–39			0.42	0.93	0.24***	0.31
			(0.69)	(0.69)	(0.05)	(0.70)
Above 40			6.14**	7.22**	0.46**	6.05**
			(2.22)	(2.23)	(0.16)	(2.22)
Health						
Fair/poor			2.48**	2.63**	0.11+	2.34**
			(0.87)	(0.88)	(0.06)	(0.87)
Social-economic status						
Income (log of income)						
			0.03	0.002	–0.001	0.006
			(0.73)	(0.74)	(0.05)	(0.731)
Occupation						
Managerial and technical staff						
			0.02	–0.47	–0.15+	–0.08
			(1.15)	(1.17)	(0.08)	(1.15)
Propertied class						
			0.57	0.78	0.04	0.68
			(1.21)	(1.23)	(0.09)	(1.21)
Education						
Secondary or high school						
			2.79	2.91+	0.05	2.79+
			(1.63)	(1.65)	(0.12)	(1.63)
College						
			2.90	3.52+	0.21+	2.97+
			(1.78)	(1.80)	(0.13)	(1.78)
Migration experience						
Formal social participation (No = 1)						
			0.67	0.85	0.03	0.78
			(0.81)	(0.82)	(0.06)	(0.81)
Informal social participation (No = 1)						
			1.46*	1.50*	–0.01	1.52*
			(0.61)	(0.62)	(0.05)	(0.61)
Migration time (short = 1)						
			1.66*	1.40+	–0.12*	1.70*
			(0.72)	(0.72)	(0.05)	(0.72)
Employment status						
Underemployment						
			4.08	4.96*	0.25	4.34+
			(2.22)	(2.25)	(0.16)	(2.22)
Relative deprivation						
			–0.32	–0.41+	–0.05**	–0.28
			(0.21)	(0.22)	(0.016)	(0.22)
Cons	19.23***	18.54***	17.06**	18.43**	0.733+	16.56**
	(0.32)	(0.35)	(5.83)	(5.91)	(0.43)	(5.84)
<i>N</i>	408	407	395	395	395	395
Pseudo R-sq	0.0095	0.053	0.118	0.092	0.20	0.121

Note. † $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$.

significant direct effect on anomie, but the mediating variable marriage squeeze has a significant effect on anomie ($r = 2.55$; $p < .001$).

The results of the Sobel–Goodman test in Table 6 provide further evidence of the mediating effect of marriage squeeze between marriage aspiration and anomie among

unmarried male migrant workers. There is a significant indirect effect of marriage aspiration on anomie ($r = 0.627$; $p < .01$), but there is no significant direct effect of marriage aspiration on anomie. Marriage squeeze plays a fully mediating role in the relationship between marriage aspiration and anomie, and about 32% of the effect of

Table 6. Sobel–Goodman Mediation Tests.

	Coef	Std Err
Sobel	0.627**	0.240
Goodman-1	0.627**	0.244
Goodman-2	0.627**	0.235
Indirect effect	0.627**	0.240
Direct effect	1.328	0.910

marriage aspiration on anomie is mediated by the marriage squeeze. These results support Hypothesis 2.

From Model 6, we see that some control variables have significant effects on anomie. Education is significantly and negatively related to anomie. Compared to elementary school, both secondary and high school and college are significantly associated with anomie ($r = 2.79$; $r = 2.97$; $p < .1$). Unmarried males with a higher level of education also have greater anomie. This finding differs from previous results, and we will discuss this difference next. Migration experiences are significantly associated with anomie; in Table 5, there is a significant association between migration time and anomie. Compared to migration time of more than 2 years, migration time of less than 2 years significantly increases the level of anomie among unmarried males ($r = 1.7$; $p < .05$). Compared to those with full employment, those with underemployment have a higher risk of increase in anomie ($r = 4.34$; $p < .1$). Lack of informal social participation also significantly increases the level of anomie among unmarried male migrant workers ($r = 1.52$; $p < .05$). Model 6 also showed significant associations between age and anomie, and health and anomie. Compared to age less than 28, age above 40 significantly increases the level of anomie ($r = 6.05$; $p < .01$). Compared to the healthiest, poor health increases the level of anomie ($r = 2.34$; $p < .01$).

Conclusion and Discussion

This article has employed psychological elements to explore the mechanism of anomie among unmarried rural male migrant workers. The results identified that perceived marriage squeeze exerts direct effects on anomie, and that marriage aspiration has indirect effects on anomie. The perceived marriage squeeze mediates the relationship between marriage aspiration and anomie. The findings also reveal that education and difficulty in migration and social integration also affect anomie.

The perceived marriage squeeze has a significant direct negative influence on anomie. A number of qualitative studies have reported that older unmarried males report high rates of psychological distress in the

context of gender imbalance (Li et al., 2009; Wei et al., 2008). The findings indicate that the association between perceived marriage squeeze and anomie is still significant when control variables are included ($p < .001$), which is consistent with the findings of previous research. Perceived marriage squeeze is a kind of “aversive situation” (Agnew, 1985), which is likely to frustrate unmarried rural male migrant workers and lead to their anomie because they can’t escape this aversive situation.

Unmarried males’ experience of the marriage squeeze can also lead to them being labeled as without “ben shi” (ability; Lin, 2016), and being treated as not fully adult (Ehrenreich, 1983). This then undermines their sense of masculinity (Choi, 2018). Both of these might produce an identity crisis and lead to individual anomie.

Marriage aspiration has an indirect negative influence on anomie among rural male migrant workers, and might affect anomie through the perceived marriage squeeze. Marriage aspiration is significantly related to perceived marriage squeeze, which is consistent with the idea of “blockage of goal-seeking behavior” (Agnew, 1985). In the traditional Confucian culture, getting married is regarded as a cultural norm (Lin, 2016), and the idea that everybody should get married is widely prevalent (Yang et al., 2012). The traditional marriage culture would not only push single males to try to get married, but also shape their traditional marriage values through competition of marriage opportunities. Although the unmarried male is aiming toward the marriage goal, his path is blocked because of the gender imbalance, which might produce a strong sense of the marriage squeeze. In turn, the sense of marriage squeeze as an aversive environment might lead to frustration and anomie.

Education can increase the level of anomie among unmarried rural migrant workers, which is contrary to findings of previous research in China (Yang et al., 2017). A possible reason for this difference is that those with higher education are more likely to be frustrated, due to the conflict between higher education and low socioeconomic status. Absence of informal social participation and problems during early migration stages increase the level of anomie. Anomie is highly sensitive to social isolation, while underemployment also increases the level of anomie. Both of these findings show that social integration in the destination city is also an important determinant of anomie.

In discussing our findings, we noted that Lee’s (1974) work opened anomie theory to a wider range of variables, which extend traditional explanations that concentrate on socioeconomic status (Ryan, 1981). Lee’s findings on the negative association between marital satisfaction and anomie were drawn from a sample of young married couples. The increasing availability and

acceptance of divorce may reduce the negative influence of marital failure on anomie (Ryan, 1981). However, compared to marriage happiness, marriage squeeze and its consequences, such as failing to get married, are more likely to lead to malintegration and anomie. Marrying is a cultural goal to which many people strive in any cultural context, but especially in a patriarchal society. Therefore, the experience of marriage squeeze leads to frustration and stress, and all of the above experiences are likely to lead to anomie. The findings in this study have evidenced the reverse relationship between marriage squeeze and anomie, which implies that using marriage aspiration and marriage squeeze to explain psychological anomie opens anomie theory to a wider range of variables. In addition, in the patriarchal context, unmarried male rural migrant workers are facing marriage and socioeconomic squeezes due to gender imbalance and population migration, which are likely to increase their level of anomie. Thus, returning to anomie theory helps to understand how China's social and demographic transition is shaping peoples' opportunities and their health.

The findings have some implications. Within the Chinese culture of universal marriage, most unmarried adults are expected to marry during their marriageable ages. However, because of bride shortage in the marriage market, huge numbers of unmarried males will not marry at these ages. Due to the household registration system and patriarchal culture, many unmarried male migrants not only fail to achieve their role as breadwinners, but also have to go back to their poor birthplace. Since females often migrate to marry "up," the result is a large number of surplus males of low socioeconomic status living in poor areas who are likely be squeezed for the long-term in the marriage market. Further, bride shortage in the marriage market triggers competition between unmarried males, who might then have increased marriage aspiration. However, for many of them, gender imbalance in the marriage market blocks the path to marriage, which leads to a serious disjunction between marriage aspiration and the perceived marriage squeeze, resulting in frustration and anomie. The perceived marriage squeeze is a difficult experience, and the bride deficit may prevent the marriage-squeezed unmarried males from avoiding this painful situation, which might lead to frustration and anomie. Therefore, as marriage squeeze it is reasonable to predict that anomie will become an increasingly serious problem for unmarried males, especially those who live in poor rural areas.

The marriage squeeze might undermine unmarried males' masculinity, with negative effects on their self-identity resulting in social isolation. Within the patriarchal culture, being and becoming a responsible man

and undertaking concomitant obligations are regarded as components of masculinity (Lin, 2016). Because of the household registration system, migrant workers have no access to the welfare sponsored by local government (Pun, 2004), and must take insecure, poorly paid, and low-welfare jobs (Li et al., 2015), which means that they might fail to achieve their desired role as breadwinners, undermining their sense of manhood (Choi, 2018). At the same time, the marriage squeeze also deprives these unmarried males marriage opportunities due to gender imbalance. If unmarried men fail to achieve these main roles, it might result in them being treated as not fully adult or masculine (Ehrenreich, 1983; Lin, 2016). These stigmas can produce social isolation and self-isolation, with loss of meaning in their lives and a sense of powerlessness. The resulting social stress can then undermine their health.

Gender imbalance is a problem not only in China, South Korea, and India, but also in some ethnic groups in developed countries such as the United States. For example, Angrist (2002) found that there has been, for a long time, gender imbalance in the local marriage market in American history. Asian American men and black women are still disadvantaged in the marriage market, and may experience marriage squeeze, because of ethnic intermarriage (Crowder & Tolnay, 2000; Kao, Balistreri, & Joyner, 2018). In other words, anomie due to gender imbalance also might be a global problem. In addition, health is determined by an individual's organic, psychological, and social resources (Freidl, 1997). Anomie is the kind of social-psychological syndrome from which individuals can develop interpersonal alienation, malintegration, and lack of meaning in their lives (Srole, 1956). This may not only be used as an indicator of mental illness, but also be treated as a psychological influence on physical health (Freidl, 1997). Thus, we argue that there should be more attention paid to the relationship between anomie and physical health in the context of gender imbalance and population migration.

Limitations

This study has several limitations. The data were collected in a single city, which may not necessarily be representative of other areas. Also, the data came from a survey of rural-urban migrant workers, which may not necessarily be representative of other Chinese subgroups. Further, although there is a reason to believe that marriage squeeze and marriage aspiration are the determinants of anomie, using cross-sectional data precludes any inference of a causal relationship. In addition, the nonrandomness of the data due to the lack of a sample frame might bias the results. Also, this study only

collected micro-data, and measured perceived marriage squeeze at the individual level, which is related to but different from the population-level marriage squeeze.

Future research expanding on these issues will improve understanding of the relationship between gender imbalance and anomie in China.

Appendix A

Table A1. Descriptive Statistics for Independent Variables by Working Data and Raw Data.

Working data		100%	Raw data		100%
Marriage aspiration, %	Hope to get married urgently	11.92	Marriage aspiration, %	Hope to get married urgently	11.92
	Other	88.08		Other	88.08
Perceived Marriage squeeze, %	Perceive marital difficulty	31.90	Perceived marriage squeeze, %	Perceive marital difficulty	32.12
	Don't perceive marital difficulty	68.10		Don't perceive marital difficulty	67.88
Age, %	Below 27	60.25	Age, %	Below 27	60.61
	28–39	37.72		28–39	36.90
	Above 40	2.03		Above 40	2.49

Appendix B

Table B1. Regression of Anomie on Marriage Aspiration and Perceived Marriage Squeeze ($N = 520$).

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Marriage aspiration						
Hope to get married urgently	1.97** (0.73)			1.93** (0.74)	0.24*** (0.06)	1.33+ (0.74)
Perceived marriage squeeze						
Perceive marital difficulty		2.96*** (0.50)	2.71*** (0.54)			2.55*** (0.54)
Individual factors						
Age						
28–39			0.42 (0.54)	1.00+ (0.53)	0.27*** (0.04)	0.31 (0.54)
Above 40			6.14*** (1.81)	7.42*** (1.83)	0.54*** (0.15)	6.05*** (1.81)
Health						
Fair/poor			2.41*** (0.66)	2.62*** (0.68)	0.11* (0.06)	2.34*** (0.66)
Social-economic status						
Income (log of income)			0.02 (0.58)	0.004 (0.59)	-0.001 (0.05)	0.006 (0.57)
Occupation						
Managerial and technical staff			-0.01 (0.91)	-0.43 (0.92)	-0.14+ (0.08)	-0.08 (0.91)
Propertied class			0.63 (0.95)	0.61 (0.97)	-0.03 (0.08)	0.68 (0.95)
Education						
Secondary or high school			2.79* (1.20)	3.04* (1.32)	0.10 (0.11)	2.79* (1.29)
College			2.91* (1.43)	3.61* (1.46)	0.25* (0.12)	2.97* (1.43)
Migration experience						
Formal social participation (No = 1)			0.67 (0.63)	0.86 (0.64)	0.03 (0.05)	0.78 (0.63)

(continued)

Table B1. (continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Informal social participation (No = 1)			1.50** (0.47)	1.50** (0.48)	-0.01 (0.04)	1.52** (0.47)
Migration time (Short = 1)			1.662** (0.56)	1.437* (0.57)	-0.103* (0.05)	1.699** (0.56)
Employment status						
Underemployment			4.13* (1.82)	4.79* (1.86)	0.18 (0.15)	4.34* (1.82)
Relative deprivation			-0.32+ (0.17)	-0.41* (0.17)	-0.05*** (0.01)	-0.28+ (0.17)
Cons	19.22*** (0.25)	18.54*** (0.28)	17.01*** (4.61)	18.27*** (4.69)	0.67+ (0.38)	16.56*** (4.61)
N	520	520	503	503	503	503
Adj R-sq	0.012	0.062	0.154	0.121	0.194	0.158

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Notes

1. According to the 2010 Sixth National population census data, the sex ratio at birth (SRB) in Fujian, Jiangxi, Sichuan, Hubei, Anhui, Henan, and Hunan are 125.71, 128.27, 118.1, 123.94, 131.07, 127.64, and 125.78, respectively.
2. 2009 Nian NongMin Gong Jian Ce Diao Cha Bao Gao (in Chinese) http://www.stats.gov.cn/tjfx/fxbg/t20100319_402628281.htm.

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