

Marriage, Health and Old-age Support: Risk to Rural Involuntary Bachelors' Family Development in Contemporary China

Abstract

In the traditional system of Chinese families, individuals are embedded in the institution of the family with defined obligations to enhance family development. As a consequence of the male-biased sex ratio at birth in China since the 1980s, an increasing number of surplus rural males have been affected by a marriage squeeze becoming involuntary bachelors. Under China's universal heterosexual marriage tradition, family development of rural involuntary bachelors has largely been ignored, but in China's gender-imbalanced society it is necessary to adopt a family-based approach to identify and study the plight of rural involuntary bachelors. Studies on gender imbalance indicate that these men face multiple risks from the perspectives of their life course, the family life cycle, and the family ethic. To a certain extent, these risks are caused by a conflict between the individual's family life and family ethics and are mainly reflected in problems concerning marriage, health, and old-age support. Not only do these vulnerabilities affect the individual and family development across the whole life cycle, but also pose major risks to social development in the face of strong gender imbalance. In order to deal with risks faced by rural involuntary bachelors, core ethical principles, including autonomy, beneficence, and justice need to be adopted. Through adjustments to informal support provided by the family and formal support provided by policy-makers, risk of uncertainty in family development faced by rural involuntary bachelors could be reduced.

Keywords: rural involuntary bachelor; family development; risk; family ethic.

Introduction

In China, the institution of family is a reproduction system configured by family structure, family function, and family ethics (Wang 2015). China's population changes, combined with other social transformations, affect families' development in terms of changes in family structure, perpetuation of the culturally accepted moral basis of family relations, and realization of family function (Li 2018). The current gender imbalance in China is the result of son preference in the family fertility tradition, advanced fetal sex-determination technology, sex-selective abortion, and national family planning policies since the 1980s. Gender-imbalanced population structure is directly caused by sex selection at birth, which is a bioethical issue involving multiple stakeholders: aborted female fetuses, families, and medical service institutions. One of the direct impact of son-preference is visible in the growing male-marriage squeeze

in China. As the marriage squeeze faced by rural disadvantaged single males intensifies and affects the ordinary daily life of these men, who wish to marry but have great difficulties in finding brides, they are unable to achieve the expected life course trajectory or fulfill expected filial duties in the face of shrinking family size. As a consequence of shrinking family size and fewer children in the core family, care possibilities within the family have become limited and difficult to sustain even for married single children, let alone children who live alone as bachelors. In the past 40 years, the Chinese government has focused on missing girls and correcting the gender imbalance through a care-for-girls program (Li et al. 2016), but over time, the problems faced by rural involuntary bachelors have become increasingly severe (Das Gupta et al. 2016).

Previous studies have identified surplus men as caused by silent biological discrimination at birth in China, India, South Korea, and other Asian and European regions (Hvistendahl 2011), and involuntary bachelors in China have been linked with stigmas and threats to the society including forced marriage, trafficking in women, bride-buying, AIDS/HIV transmission, and an increasing social security burden (Jin & Liu 2009; Jin et al. 2010; Liu 2015; Merli & Hertog 2010; Hudson & Den Boer 2004). With the focus on the survival and development issues of rural involuntary bachelors, their families have mostly been ignored. Also missing is a focus on the family ethic, which provides essential principles for the guidance and evaluation of how the Chinese family should operate, including changes in family structure, realization of family functions, performance of individual family roles and so on. As a result, perceived risks of threats to society veil the vulnerability of rural involuntary bachelor families, and there is insufficient understanding and analysis of risks of uncertainty to involuntary rural bachelors' family development. Our article is policy oriented and is based on a systematic review of relevant literature and our previous survey studies and fieldwork data on consequences of gender imbalance. We argue that the family ethic, as well as the individual life course and the family life cycle, are important axes for studying the risks of uncertainty to family development faced by involuntary rural bachelors. Intergenerational reciprocity that regulates parenting and family care, as well as intragenerational norms that regulate intimate relations and protection, are affected by the consequences of gender selection at birth. We first analyze the social contexts of the development of rural involuntary bachelors' families. Then we combine perspectives on the individual life course, the family life cycle, and family ethics to analyze typical risks to family development with respect to marriage, health, and old-age support. Finally, we explore possible adjustments to family ethics taking place with regard to informal and formal social support in response to the family development risk confronting rural involuntary bachelors in China's gender-

imbalanced society.

The social contexts of rural involuntary bachelor families

Empirical studies and field surveys on gender imbalance have found that rural involuntary bachelor families include men over 28 years who encounter a marriage squeeze and therefore have difficulty in marrying (Jin et al. 2013). Such families are mainly of three types; (1) the “original family”, where an unmarried male lives with his parent/s (2) the divorced “secondary family”, where a rural male married, but the marriage dissolved and he returned to single status (3) the lifelong “single-person family”, where a never-married male lives alone or lives alone after the death of his parent(s) (Jiang et al. 2009). In China’s gender-imbalanced society, the original family is generally very poor and endures societal pressure due to the marriage difficulty of an adult single son. The “secondary family” refers to those rural parents whose children have experienced unconventional marriage trajectories. For example, their adult son might get married via forced marriage or transnational female trafficking. However, such marriages are easily dissolved due to poverty and ethical or legal issues around women and family, and the son eventually returns to single status. The lifelong single-person family faces an absence of intimate relations and internal family support in most aspects of family life.

First, the cumulative consequence of sex selection at birth is the increasing gender bias in the Chinese population, which is increasingly severe among marriageable age cohorts. Since the 1980s, the sex ratio at birth has been unbalanced; in the age cohort of the newborn population, the number of males is significantly more than that of females. After more than 30 years of this gender bias, the effect of the gender-imbalanced sex ratio at birth has become intensified and has led to a female shortage in the marriage market (Tucker and Hook 2013). Previous research using data from the Sixth National Census of China shows that there are about 25 million more unmarried men than women between the ages of 20 and 49, and the sex ratio of unmarried men to women is more than 145 to 100. In addition, the number of unmarried men over 30 years old was 18.86 million in 2010, four times greater than the number of unmarried women of the same ages (Li et al. 2015).

Second, the marriage squeeze is more intense in rural areas in comparison to urban areas, and rural involuntary bachelors suffer more from the consequences of gender imbalance. According to marriage tradition, men usually prefer women of a lower socioeconomic status than themselves, and women prefer men of a higher socioeconomic status. Consequently, rural men in relatively remote areas, from families that have disadvantaged socioeconomic status and relatively weak social

support networks are unable to bear the high cost of marriage and become involuntary bachelors (Attané 2013; Das Gupta et al. 2013). There is a significant difference between rural unmarried and urban unmarried men in their chance of marrying; the probability that rural unmarried men marry by the age of 30 or later is about 55%, and the corresponding marriage expectation time exceeds 20 years, while the figures for urban unmarried men are 80% and 12 years, respectively (Guo et al. 2016). It is estimated that with the increased impact of the higher sex ratio at birth since the 1990s, the proportion of men over 50 years old who will never marry will rise sharply from 5% in 2035 to more than 13% in 2050 (Jiang et al. 2014). As a result, about 30 to 50 million Chinese men will suffer from the marriage squeeze in the near future (Guilmoto 2012).

Third, rural involuntary bachelor families are affected by smaller family size and the increased number of single-person families. Along with the shrinking size of households (Zeng et al. 2014), the nuclear family has become the main family structure in China. At the same time, the number of single-person families has gradually increased. According to National Census data, the proportion of single-person families rose from 7.98% in 1982 to 13.67% in 2010 (Wang 2013). This increase reflects imbalanced social and gender development between urban and rural areas, and different views on marriage and family. To be more exact, in urban areas, older unmarried women make up some single-person families. Since these women are often well educated and have decent socioeconomic status, they are reluctant to choose men of lower socioeconomic status to marry; this reflects females' active selection (Gavin 2007; The Economist 2011; Yue and Qian, 2014; Liu and Cai 2015). In rural areas, however, with the shortage of women and women's rural-urban migration, unmarried men have difficulty finding wives and are forced to become single-person families. Thus, forces other than mere demographic imbalance contribute to the male marriage crisis.

Fourth, family ethics change as a response to the transformed family structure. The family ethic constitutes a series of rules or norms guiding the tasks of a family and its members within and outside their family in the process of family development (Dai et al. 2005; Scales et al. 2010). Unlike the liberal Western family ethic, which is based on individual freedoms and personal rights (Harry and Adam 2014), the oriental family emphasizes its solidarity and intergenerational reciprocity in its development process (Li 2005; Croll 2006). In the Confucian family ethical tradition, family morals and norms emphasize intergenerational and intragenerational contracts that govern family functions and tasks. For example, the adult son's marriage is financially covered by the parents and serves to continue the family line (Wang 2010); sexuality

is restricted within marriage and its objective is reproduction (Li et al. 2010); old-age support of elderly parents is the main obligation of male offspring and serves to express filial piety (Jin et al. 2012). As family size shrinks, family structure simplifies, and family functions depend more on external support; family roles guided by the traditional family ethic have changed in adjusting to changing relationships between the conjugal couple, between parent and child, and among family members. Historically, the core point of family ethic is vertically based on the parents-to-offspring relationship in a multigenerational family. Currently, besides the vertical parent-child family relationship, the conjugal relationship is increasingly important in smaller nuclear families.

Analysis of risk to family development of rural involuntary bachelors

Family development refers to “the process of progressive structural differentiation and transformation over the family's history, to the changes in roles of family members as they seek to meet the changing functional requisites for survival and as they adapt to recurring life stresses as a family system” (Hill & Mattessich 1979). At specific family stages, the family performs the essential tasks of reconstructing society through marriage, birth, socialization, and care. Correspondingly, at the different family development stages, each individual has a specific role guided by the family ethic, such as getting married, raising children, taking care of the elderly, etc. If the family or individual family member cannot carry out their morally prescribed duties, or realize certain family functions, risks to family development can arise. In this research, risks to family development mean the uncertainty of structural transformation and the changing roles of family members over the family's history, which go against traditional family norms concerning family and individual roles. In the gender-imbalanced society, family development of rural involuntary bachelors entails the risk of being incapable of meeting the physical, psychological, developmental, and self-realization needs of family members. This might result in precarity of family welfare and endanger the family's sustainable development (Brearly 1982; Miller 2000).

In the present analysis, risks to rural involuntary bachelors' family development concern three typical domains, namely marriage, health, and old-age support, generated by the following four perspectives illustrated in Figure 1. (1) The horizontal x-axis refers to the growth trajectory of the core family members; here this refers to birth, adolescent growth, adult marriage, or childbearing, potential secondary family development, and elderly care of rural involuntary bachelors. (2) The horizontal y-axis refers to the transformation of the family life cycle, and covers the original family,

potential extended or secondary family, living with a single parent, and single-person family of rural involuntary bachelor families. 3) The vertical axis refers to the transformation of the family ethic, from parents supporting offspring, to relations between spouses, and offspring supporting parents. (4) The diagonal line refers to specific risks to family development, namely poverty, marriage-related risk, health risk, and old-age support risk. As poverty is common for most disadvantaged families, this study focuses on the other three typical risks to family development faced by rural involuntary bachelors.

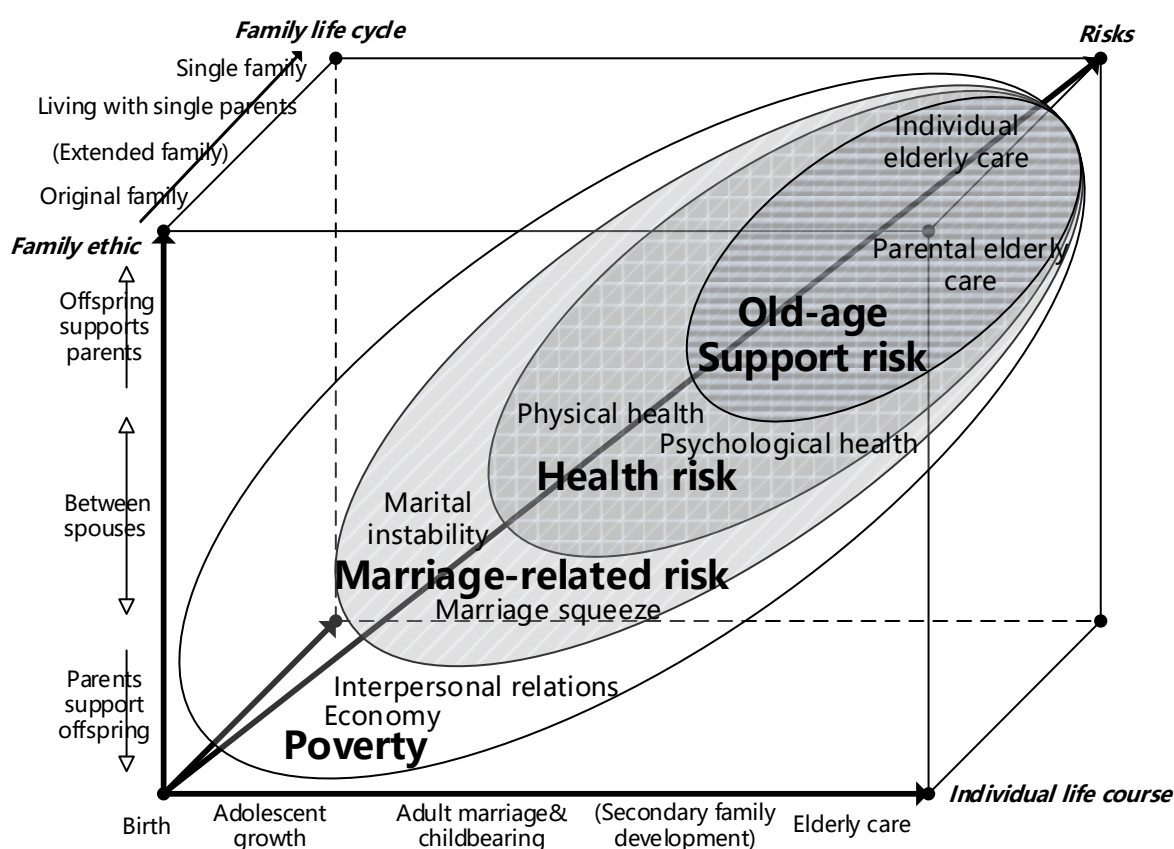


Figure 1. Risks to family development faced by rural involuntary bachelors

Changes over an individual's life course correspond to the transitions of the family at certain periods. During the family's development, its members should experience certain important life events at suitable ages; such as birth, receiving education, getting married, finding jobs, raising offspring, death, and so on. These events relate to family expansion, migration, and contraction, and are directed by specific ethical relationships at different times. From the perspective of family ethics, on the one hand,

the family development process is reflected in changes to the intergenerational relationships (Croll 2006). On the other hand, family development tasks are expressed in the responsibilities and obligations of specific family members in specific family life situations, such as children's marriage, spouses' health, and family's ageing support.

Marriage-related risk

Chinese family ethics focus on intergenerational rights and obligations between parents and children (Steinar and Espen 2017). In the Chinese family system, heterosexual marriage is the main form of marriage and is accepted by most families. At marriageable ages, the younger generation should get married, and their parents have the ethical responsibility to help their male offspring to marry, and hence achieve family expansion from the original family to the secondary family. Gender imbalance makes this ethical responsibility difficult to realize, which generates pressure on and between generations and leads to the emergence of marriage-related problems and even legal issues. For unmarried rural men, the marriage-related risk is about the difficulty of achieving marriage, and for already married rural men, this risk is of instability of their existing marriages.

The marriage squeeze generates marriage difficulties for vulnerable rural men, and this challenges the family's ethical tradition. In gender-imbalanced China, marriage costs marked by bride price, a new apartment, and so on, have risen sharply (Jiang and Sanchez-Barricarte 2012). At the same time, the shortage and rural-urban migration of marriageable females have seriously restricted the marriage opportunities available to disadvantaged rural families. As a result, the marriage options for older unmarried males in rural areas have been significantly reduced (Edlund 1999; Das Gupta et al. 2013). Studies have shown that rural involuntary bachelors are significantly behind urban men over 30 in both the probability of getting married and the expected number of years before getting married. After 50 years of age, their probability of never marrying is significantly increased (Guo et al. 2016).

For previously married rural men, the marriage squeeze caused by gender imbalance has also weakened the relationship between spouses and increased the instability of marriage. This marriage-related risk is connected to the family through social norms, legal regulations, and other social risks that have expanded the risk to marriage. First, the marriage squeeze and the acceptance of divorced Chinese women in the marriage market have placed women in a relatively dominant position in marriage (Liu 2009), and the family ethic has weakened the constraints on marriage (Liu 2015). As a result, some poor rural married families face reduced marriage stability. Fieldwork on

consequences of gender imbalance conducted by our research team in rural areas of south Shaanxi province in 2015 shows that some rural married men face the risk of getting divorced and returning to poverty. Second, unconventional mate-selection behaviors of the families of rural involuntary bachelors have expanded marriage-related risks (Meng and Li 2017). Some marriage-related anomic behaviors violate social ethics, such as taking a child bride or breaking laws against early marriage, while others are linked to criminal behaviors, such as marriage fraud, human trafficking, and unregistered transnational marriages. These anomic behaviors expand the risks due to gender imbalance from family ethics to social morality, legal regulations, and even international relations. On the one hand, women's legal rights are violated, while on the other, fraudulent marriages and unregistered transnational marriages make rural involuntary bachelor families more vulnerable to family development risks, such as poverty and return to poverty due to marriage instability (UNFPA 2018).

Health risk

The marital family formed by the ethical relationship between husband and wife has the basic responsibility of guaranteeing the survival and health of spouses. Without a wife, the quality of life of rural involuntary bachelor is relatively lower (Attané & Yang 2018). Most daily life care, health care, intimate care, and other family welfare from a potential secondary family are absent (Mo 2005; Li et al. 2010). Thus, in the absence of a spouse their health is at risk. Health risks to rural involuntary bachelor families include risks to both their physical and mental health.

Without a spouse, rural involuntary bachelors suffer from health disadvantages, which include problems with general physical health and sexual health. First, for general physical health, unmarried men are generally in worse physical condition than married men (Rose 1995). Without marriage and marital family constraints, it is easy to develop an unhealthy lifestyle, including smoking, excessive alcohol consumption, etc., which are potential causes of poor health. Second, the sexual ethic is originally defined within the marital family, and without marriage it is difficult to abide by this ethic (Li and Zheng 2008). Rural involuntary bachelors are often sexually repressed and have low levels of sexual satisfaction (Schachner et al. 2008; Attané et al. 2013). At the same time, due to the lack of a legitimate sexual life, risky sexual behaviors such as commercial sex, one-night stands, etc., may be engaged in by rural involuntary bachelors (Yang et al. 2014). These sexual activities violate traditional sexual norms and also pose a threat to their sexual health while increasing the spread of sexually transmitted and reproductive health diseases (Yang et al. 2017).

The psychological health risks of rural involuntary bachelors involve general mental health and sexual mental health. First, for general mental health, since it violates the traditional Chinese family norm regarding both individual and family obligations, failure to marry increases the psychological pressure on rural involuntary bachelors and their parents from neighbors and communities. At the same time, due to the lack of spousal support, a bachelor subculture can form in rural areas, which can lead to behavioral problems (Jin and Liu 2009). Second, for sexual mental health risk, on the one hand, rural involuntary bachelors are generally sexually repressed due to the absence of marital sexual life (Attané and Yang 2018). On the other hand, the fear of sexually transmitted diseases generates concerns by rural involuntary bachelors who, without other options, may choose to engage in risky sexual behaviors.

Old-age support risk

Unlike Western old-age support systems, such as old-age homes and assisted living and the tradition of social pensions, an adult male offspring's obligation to support elderly parents is an important manifestation of the Chinese family ethic, and is seen as a return for the parents' work in raising their child. Usually, old-age support is provided by adult children, and mainly includes economic support, instrumental support and emotional support (Song et al. 2012). Family pressure to be responsible for old-age support is felt between parents and adult sons, and while rural involuntary bachelors are expected to provide old-age support to their parents, they must also worry about it for themselves. This also worries their parents while they are alive.

Rural involuntary bachelors generally cannot provide sufficient economic and emotional support for their elderly parents. According to Chinese family norms, a son and his marital family have the obligation to support elderly family members through intergenerational support (Fei 1986). Based on our fieldwork, most rural involuntary bachelors are co-resident with their parents or live nearby and can provide only basic daily care for their parents. Due to individual poverty and marriage failures, these men have difficulty in carrying out their old-age support responsibility for economic and emotional support due to the "missing" secondary family.

When rural involuntary bachelors get older, their own old-age support is at risk. First, old-age support of rural involuntary bachelors is needed earlier in the life-course. Studies have shown that, compared to married males, the average remaining life expectancy of rural involuntary bachelors in each age cohort is lower; most rural bachelors are at a higher risk of death, and their life span is relatively short (Guo et al. 2018). Life expectancy minus 15 years is commonly used as a sign of entering old age (Hu and Peng 2018; Warren and Sergi 2010). Compared to married men, old-age

support of rural involuntary bachelors is therefore needed earlier. Second, family old-age support needs will become social needs and increase pressure on social security. Under the double squeeze of high probability of death and low probability of first marriage, old-age support for rural involuntary bachelors is difficult to predict. The need for old-age support of the increasing number of rural involuntary bachelors will be delegated to formal social support; that is, the social security system, thereby increasing the social pension burden and cost of medical and social insurance (Guo and Jin 2016).

From the above analysis of three typical areas, we find two features of risk related to family development of rural involuntary bachelors. The first is the overlap and interaction of multiple family development risks at a specific family stage. These risks are closely connected and run through the individual life course, the family life cycle, and changes in family ethical relationships. The second is the accumulation and intensification of multiple family development risks over the family's history. Poverty is the initial risk faced by rural involuntary bachelor families, and it projects a lifespan influence over all other risks. If marriage does not occur, the other two risks accumulate and affect the remaining life of rural involuntary bachelors, whose families are likely to fail in the realization of their Confucian family ethical obligations.

Response to assisting marginalized rural involuntary bachelors' families

Family ethics contributes importantly to family development. Since the risks to family development of rural involuntary bachelors come from the dilemma between the current family situation caused by the gender-biased demography and family roles embedded in the Confucian family ethics, it is necessary to reduce the family ethical obligations for these disadvantaged families and adjust traditional family ethics in the above-mentioned areas. For those family obligations and family functions, families of rural involuntary bachelors not only need an internal family support system, but they also need external support for long-term development (Ilana 2011) . For internal support, family members are generally loyal providers, and the family ethic offers an operational logic for internal providers. External support usually refers to formal outside support providers, for example, government and community. The family ethic also works in terms of guiding access to formal support. In order to deal with the ethical issues involved in the risks to family development, the basic principles of ethics of autonomy, beneficence, and justice (Beauchamp and Childress, 1983) must also be part of the family ethic in guiding internal and external support activities. The

following remarks pertain to the risk of uncertainty to family development of rural involuntary bachelors.

First, the autonomy of marriage and love should be respected within the family. It is necessary to weaken the ethical responsibility of parents for their adult sons' marriage and transfer the decision-making power to the parties involved in the marriage. Behind the two partners of a marriage stand two different families, and most Chinese parents regard it as their duty to ensure their children's marriage. This interferes with the marriage rights of offspring and generates marriage risk. In a gender-imbalanced society, , parents' support is necessary, but interference by parents in the marriage of their children should be limited to reduce the potential risk to the marriage ethic. At the state level, unmarried younger males should be encouraged to participate in social activities; for example, skill training, poverty alleviation projects and rural-urban migration for job opportunities, through which relatively young bachelors may change their disadvantaged individual status and expand their social connections. Finally, rural unmarried men should be empowered with autonomy in terms of mate selection, which can solve health and old-age support risks, reduce the depression caused by their inability to marry, initiate family development, and help them carry out their other expected duties.

Second, beneficence should deal with the risk of marriage instability and strengthen marriage-related protection (Borneman 2001), which will weaken the traditional male-centered family position, and respect both parties of the marriage. In order to reduce internal family conflicts and to protect stakeholders, outside support providers, especially legal institutions and relevant departments of government, should advocate gender equity in family roles, and responsibility of family members toward family development. On the one hand, although international marriage is not so popular, there are "illegal" foreign bride families in some rural areas. Legal protections of the rights and interests of women and rural involuntary bachelors should be improved, and human trafficking, illegal immigration, unregistered transnational marriage, and marriage fraud should be prevented. On the other hand, for families with foreign daughters-in-law, the women's well-being should be a concern. Social security and medical service should cover such transnational marriage migrants, and language education and skill training should be provided to them to better adjust in their marital home and community. This would help them find and expand job opportunities and promote their social integration, thereby helping the development of transnational marriage families.

Third, the social security system should be adjusted to apply to rural involuntary

bachelor families. As these families are new vulnerable groups, preferential policies are needed to ensure social justice. Since internal family support for rural involuntary bachelors may often be insufficient, formal support providers, mainly government and social security institutions, should be responsible for these men, especially for the older bachelors. Although there are already social security policies that aim to help the poor, their application should consider the consequences of gender imbalance. The government should modify some of its rules and include rural involuntary bachelor families in its coverage of health and social security as soon as possible. For “bachelor villages”, where these bachelor families are concentrated, community-based medical services and old age homes should be established and supported. For involuntary bachelors from extremely poor areas, migration relocation projects should be introduced so as to resettle these men in better natural and social locations, equipped with adequate medical and public services, as well as job opportunities. Through dynamic adjustment of social security policies to achieve practical social justice (Tinker 2007), this would ensure that rural involuntary bachelor families are covered as early as possible.

Conclusion

China is a relatively closed population, so its gender imbalance structure will not correct naturally. It is necessary to change the previous negative labelling of rural involuntary bachelors, and address the issues that involve their closest social relations, that is, their families. From the perspectives of the individual life course, family life cycle, and family ethic, marriage, health, and old-age support are three main areas that are the foci of rural involuntary bachelors’ family development. The risks of uncertainty in marriage, including marriage difficulty and marital instability, physical and psychological health, and old-age supports for parents and the bachelors themselves, reflect the dilemma between current family situation and expectations based on traditional family ethics. As a response to family development risks, core ethical values should be emphasized including autonomy, beneficence, and justice in the process of rural involuntary bachelors’ family development. Adjustment of informal support provided by family and formal support provided by the government will reduce the traditional family pressures on rural involuntary bachelors, and generate a system to protect all stakeholders at the family level.

References

- Attané, Isabelle. 2013. *The demographic masculinization of China, Hoping for a son*. Springer International Publishing.
- Attané, Isabelle, Xuyan Yang. 2018. Between Poverty and Normative Pressure: The Quality of Life of Never Married Men in Rural Shaanxi. *China Perspectives* 1-2, 55-64.
- Attané, Isabelle, Qunlin Zhang, Shuzhuo Li, Xueyan Yang and Guilmoto Christophe. 2013. "Bachelorhood and sexuality in a context of female shortage: evidence from a survey in rural Anhui, China." *The China Quarterly* 215, 703–726.
- Beauchamp, T., and Childress J. 1983. *Principles of biomedical ethics*. New York: Oxford University Press.
- Borneman, John. 2001. Caring and being cared For: displacing marriage, kinship, gender, and sexuality. In *the ethics of kinship: ethnographic inquiries*, ed. James D. Faubion, 29-46. Rowman & Littlefield Publishers.
- Brearley, P. C. 1982. *Risk in social work*. London: Routledge & Kegan Paul.
- Croll, Elisabeth J. 2006. The intergenerational contract in the changing Asian family." *Oxford Development Studies* 34(4):473-91.
- Dai, Yelin, Chunliang Xu, and Wubing You. 2005. Family's moral and family's structure. *Academic Journal of Jinyang* 1:27-30. (In Chinese)
- Das Gupta, Monica, Ebenstein, Avraham, & Sharygin Ethan. 2013. Implications of China's future bride shortage for the geographical distribution and social protection needs of never-married men. *Population Studies* 67(1):39-59.
- Das Gupta, Monica, Avraham Ebenstein and Ethan Jennings Sharygin. 2016. China's marriage market and upcoming challenges for elderly men. In *too many men, too few women: Social consequences of the gender imbalance in India and China*, ed. Ravinder Kaur, 89-117. Orient Blackswan Private Limited.
- Edlund, L. 1999. Son preference, sex ratios, and marriage patterns. *Journal of Political Economy* 107:1275–1304.
- Fei, Xiaotong. 1986. Three comments on changes in Chinese family structure. *Journal of Peking University (Philosophy and Social Sciences Edition)* 3: 3-7. (In Chinese)
- Gavin, W. Jones. 2007. Delayed marriage and very low fertility in pacific Asia. *Population and Development Review* 33(3): 453–478.
- Guilmoto, C Z. 2012. Skewed sex ratios at birth and future marriage squeeze in China and India, 2005-2100. *Demography* 49(1):77-100.
- Guo, Qiuju, and Xiaoyi Jin. 2016. The impact of marriage squeeze on rural migrant men's old-age willingness—an analysis based on stress coping theory. *Journal of Demography* 38(02):29-39. (In Chinese)

- Guo, Zhen, Haili Liang, and Shuzhuo Li. 2018. Study on the death of old Chinese unmarried men in the background of gender imbalance. *Chinese Journal of Population Science* 6:71-81. (In Chinese)
- Guo, Zhen, Shuzhuo Li, and Marcus W. Feldman. 2016. A study on the model of male marriage squeeze of China. *Chinese Journal of Population Science* 3:69-80.
- Harry, Brighouse and Adam Swift. 2014. *Family values: the ethics of parent-child relationships*. Princeton University Press.
- Hill, R., and Mattessich P. 1979. Family development theory and life span development. In Baltes P, Bnm O (Eds), *Life span development and behavior*. New York: Academic Press.
- Hu, Zhan, and Xizhe Peng. 2018. Governance choices to cope with China's population aging. *Social Sciences in China* 12:134-155. (In Chinese)
- Hudson, Valerie M., and Andrea M. den Boer. 2004. *Bare Branches: The Security Implications of Asia's Surplus Male Population*. Cambridge: The MIT Press.
- Hvistendahl, Mara. 2011. *Unnatural selection: choosing boys over girls, and the consequences of a world full of men*. New York: the Perseus Books Group.
- Ilana Krausman Ben-Amos. 2011. *The Culture of Giving: Informal Support and Gift-Exchange in Early Modern England*. New York: Cambridge University Press.
- Jiang, Quanbao, and Marcus W. Feldman, Shuzhuo Li. 2014. Marriage squeeze, never-married proportion, and mean age at first marriage in China. *Population Research and Policy Review* 33 (2):189-204.
- Jiang, Quanbao, and Sánchez-Barricarte, Jesus J. 2012. Bride price in China: The obstacle to 'Bare Branches' seeking marriage. *The history of the family* 17(1): 2-15.
- Jiang, Quanbao, Zhen Guo, Shuzhuo Li, and Marcus W. Feldman. 2009. The family life cycle of the forced male bachelors in rural China. *Chinese Journal of Population Science* 4:64-72. (In Chinese)
- Jin, Xiaoyi, and Liu Lige. 2009. Social risk and Behavior Anomie in Context of Gender Imbalance, *Xi'an Jiaotong University Journal (Social Sciences)* 6:41-50. (In Chinese)
- Jin, Xiaoyi, Guo Qiuju, Liu Lige and Li Shuzhuo. 2010. China's Gender Imbalance and Public Security, *Youth Studies* 5:21-94. (In Chinese)
- Jin, Xiaoyi, Guo Qiuju, and Liu Wei. 2012. Old-age support of rural Chinese and policy implications in the context of gender imbalance. *Journal of Public Management* 9(3):71-81. (In Chinese)
- Jin, Xiaoyi, Liu, Lige, Li, Yan, Feldman, Marcus W., and Li, Shuzhuo. 2013. "'Bare Branches' and the Marriage Market in Rural China: Preliminary Evidence from a Village Survey", *Chinese Sociological Review* 46(1), 83-104.

- Li, Guimei, and Zili Zhang. 2008. Review and prospect of marriage and family ethics research in 30 years of reform and opening up. *Ethics Research* 5:19-24. (In Chinese)
- Li, Guimei. 2005. The study of Chinese and western family ethics. *Journal of Social Science of Hunan Normal University* 2:20-23. (In Chinese)
- Li, Shuzhuo, Qunlin Zhang, Xueyan Yang, Isabelle Attané. 2010. Male singlehood, poverty and sexuality in rural China: an exploratory survey. *Population* 65(4):679-694.
- Li, Shuzhuo, Zijuan Shang and Marcus W. Feldman, 2016. Social management of gender imbalance in China: holistic governance framework. In *too many men, too few women: social consequences of the gender imbalance in India and China*, ed. Ravinder Kaur, 249-274. Orient Blackswan Private Limited.
- Li, Shuzhuo, Xiaoyi Jin, and Yuesheng Wang. 2015. *Population sex structure and sustainable social development in China*. Beijing: Social Science Literature Press. (In Chinese)
- Li, Yongping. 2018. *Elderly crisis and family order—resources, politics and ethics in family transformation*. Beijing: Social Science Literature Press. (In Chinese)
- Liu, Shuang, and Shenghan Cai. 2015. Who have been left? *Youth Studies* 4:76-84. (In Chinese)
- Liu, Yanwu. 2009. Change of husband-wife relationship and family structure in county side. *Journal Southwest Petroleum University (Social Sciences Edition)* 2(3):23-32. (In Chinese)
- Liu, Yanwu. 2015. Despising peasant and the city fetishism aspirations of marriage: social risk of single men in rural China, *Social Construction* 6:53-69. (In Chinese)
- Merli, M Giovanna, and Sara Hertog. 2010. Masculine sex ratios, population age structure and the potential spread of HIV in China. *Demographic Research* 22:63-94.
- Meng, Yang, and Shuzhuo Li. 2017. Social exclusion of older unmarried men in rural areas in the context of gender imbalances: an analytical framework. *Exploration and Free Views* 4:81-88. (In Chinese)
- Miller, I. W. , Ryan, C. E. , Keitner, G. I. , Bishop, D. S. , and Epstein, N. B. . 2000. The McMaster approach to families: theory, assessment, treatment and research. *Journal of Family Therapy*. 22:168-189.
- Mo, Lixia. 2005. Study on the consequences of imbalanced sex ratio at birth. China Population Press. (In Chinese)
- Rose, C E. 1995. Reconceptualizing marital status as a continuum of social attachment. *Journal of Marriage and the Family* 129-140.
- Schachner, Dory, Shaver Philip, and Gillath Omri. 2008. Attachment style and long-term singlehood. *Personal Relationships* 15(4):479-491.

- Song, Lu, Shuzhuo Li, and Marcus W. Feldman. 2012. Out-migration of young adults and gender division of intergenerational support in rural China. *Research on Aging* 34(4) 399–424.
- Steinar, Bøyum and Espen Gamlund. 2017. Family ethics. *Nordic Journal of Applied Ethics* 11 (1): 1–4.
- Stephen, Scales, Adam Potthast, and Linda Oravec. 2010. *The ethics of the family*. Cambridge Scholars Publishing.
- The Economist. 2011. Asia's Lonely Hearts: Why Asian Women Are Rejecting Marriage and What That Means, 20-26 August, pp 17-20.
- Tinker Anthea. 2007. Ethics and older people. In *Ethics: contemporary challenges in health and social care*, ed. Audrey Leathard, Susan McLaren, 255-268. Bristol: The Policy Press.
- Tucker, Catherine, Van Hook, and Jennifer. 2013. Surplus Chinese men: demographic determinants of the sex ratio at marriageable ages in China. *Population and Development Review* 39(2):209–229.
- UNFPA. 2018. *Sino-Vietnamese cross-border marriage in the context of sex imbalance: view from China*. Beijing: UNFPA Country Office in China.
- Wang, Defu. 2015. Rethinking the changes of the nature of rural households in China. *Study and Practice* 10:85-91. (In Chinese)
- Wang, Yuesheng. 2010. Intergenerational relations in the marriage: accumulation and transfer of household wealth. *China Rural Survey* 3:60-72. (In Chinese)
- Wang, Yuesheng. 2013. An analysis of the changes in China's urban and rural family structures: based on 2010 census data. *Social Sciences in China* 12:60-77. (In Chinese)
- Warren, Sanderson, and Sergi Scherbov. 2010. Remeasuring aging. *Science* 329.
- Yang, Bo, Shuzhuo Li, and Zheng Wu. 2017. *An empirical research on risky sexual behaviors among China's elderly male migrants: perspective of social risk*. Beijing: Social Science Literature Press. (In Chinese)
- Yang, Xueyan, Attané Isabelle and Shuzhuo Li. 2014. "Commercial sex and condom use among involuntary single men." *American Journal of Men's Health* 8(3), 205–216.
- Yue, Qian and Zhenchao Qian. 2014. The Gender Divide in Urban China: Singlehood and Assortative Mating by Age and Education. *Demographic Research* 31:1337–1364.
- Zeng, Yi, Kenneth C. Land, Danan Gu, and Zhenglian Wang. 2014. *Household and living arrangement projections: the extended cohort-component method and applications to the U.S. and China*. New York: Springer Publisher.

