# The Wellbeing of Bereaved Parents in an Only-child Society\*

#### Yan Wei

School of Public Administration, Xi'an University of Finance and Economics, China weiyan365@163.com

#### Quanbao Jiang

Institute for Population and Development Studies, Xi'an Jiaotong University, China

recluse\_jqb@126.com

#### Stuart Basten (corresponding author)

Department of Social Policy and Intervention, University of Oxford, 32 Wellington Square, OXFORD, OX1 2ER United Kingdom

stuart.basten@spi.ox.ac.uk

## Abstract

There are currently around a million Chinese households where the only child has died and the mother is beyond reproductive age. The number of such bereaved parents, known as *shidu fumu*, is forecast to increase to over 11 million by 2050. Using a sample survey conducted in 2013 in Shaanxi Province, the paper explores the vulnerability of *shidu fumu* by various measures of 'wellbeing'. Such parents are more vulnerable than non-bereaved parents in every respect. There are also significant differences in wellbeing between *shidu fumu* due to parental characteristics. We argue that policies supporting *shidu fumu* should be strengthened.

Keywords: mortality, only-children; bereavement; shidu fumu; wellbeing; China, Shaanxi

<sup>\*</sup> This research is supported by the HSSTP project of Shaanxi Province and the key project of the National Social Science Foundation of China (14AZD096).

#### The Wellbeing of Bereaved Parents in an Only-child Society

## Introduction

In China, as elsewhere, the role of children as a source of emotional, physical, financial and structural support is clear. Historically, the transmission of the family line (through a male heir) was of paramount importance. While the 'value of children' has undoubtedly changed over time (at least in industrial/industrialising economies) from being an economic asset towards being more of an expression of higher order Maslowian needs, in systems characterised by weak institutional support for the old and sick (such as China), children clearly play a critical economic and social role. Although some changes can be seen, the translation of Confucian notions of filial piety into an obligation to care for parents is still an important feature of the landscape of ageing in contemporary China (Jiang, Li and Feldman, 2015).

China is characterised by its uniquely stringent family planning policy. Millions of only-child families have resulted from the 30-year implementation of China's family planning policy (for a review of this history of family planning restrictions, see Basten and Jiang, 2014). Contrary to popular understanding, since 1984 there have been myriad variations of the policy implemented both across locations and time, with no over-arching 'one-child policy'. Despite this, the vast majority of urban areas (as well as some other provinces with large population base such as Sichuan) were generally covered under the aegis of the 'one-child policy'. After a generation of implementation, most urban areas (as well as many rural areas) of China are now characterised by the predominance of the one-child family. This means that, perhaps for the first time in human history, a very substantial number of couples – currently estimated to be around 145 million households (Wang, 2009) – has a demonstrable reliance upon just one child.

Even though mortality in China is generally low (especially in urban areas) (J. Wang, 2013), the relative odds of an only child dying before their parents are not negligible. For a mother reaching the age of 90, for example, there is a greater than 10% chance that her only child will predecease her (Jiang, Li and Sánchez-Barricarte, 2014). There is no unified definition of 'only-child lost parents' - or more commonly called 'deprived parents', or shidu fumu – in China, but it is generally acknowledged that such parents are those who followed the prevailing family planning restriction of their time and area and only had one child, which has subsequently died. Furthermore, *shidu fumu* are characterised as being where the mother has passed her reproductive years - taken in this paper as being 49 years old (National Population and Family Planning Commission and the Ministry of Finance, 2007; Wang, Guo and Guo, 2008). Under this definition, and in the context of around 145 million only-child households, official estimates suggest that the current total number of shidu fumu is at least 1 million; and is increasing by approximately 76,000 households per year (China National Committee on Ageing, 2013). It has been estimated that the number of such families will increase to 11.84 million by 2050 (G. Wang, 2013). Given the total number of shidu fumu, a comprehensive investigation into their wellbeing is timely.

Numerous studies have documented the impact of child loss on an array of psychological, social and physical wellbeing outcomes including parental intimacy (Dyregrov and Gjestad, 2011); depression (Youngblut, Brooten, Cantwell, Del Moral and Totapally, 2013); and elevated mortality risks (Nolen-Hoeksema, Larson and Larson, 1999; Rostila, Saarela and Kawachi, 2012). The effects of bereavement are felt at different intensities across the lifespan (Rubin and Malkinson, 2001). Psychologically, the death of a child is a devastating blow (Rubin, 1990; Rubin and Malkinson, 2001), with a child's death often leading to intense reactions such as despair, physical discomfort, anger and guilt (Hare-Mustin, 1979; Sanders, 1979).

The bereavement of an only child clearly has a serious impact on the physical and psychological health of the parents (Li and Wang, 2008). The situation could be even worse when the parents of the only child have reached the age where further childbearing is impossible (Mu, 2009). Very few studies have explicitly studied this sub-group, not least because of global demographic circumstances, meaning that the numbers in such a group are (thankfully) relatively small (though for a notable, qualitative exception, see Talbot, 1996). On the contrary, because of the demographic background outlined above there have been a number of studies emanating from China on the subject. These bereaved parents of only children have been identified to have reported higher rates of depression (Ou and Li, 2013) and reported higher morbidity rates, with a 2013 survey finding 50% of *shidu fumu* suffering from depressive symptoms, over 60% having chronic diseases, and over 70% experiencing varying degrees of psychological trauma (China National Committee on Ageing, 2013). After the bereavement of their only child, many parents report detachment from normal social activities, driven both by self- and imposed-exclusion (Zhang and Jiang, 2012). While communities of *shidu fumu* exist both offline and online, a sense of social isolation is certainly present among them (Zhang and Jiang, 2012; Zhang and Shao, 2013).

In China, as in many other settings, children are viewed as the continuity of parents' lives, living dependence, spiritual sustenance and old age security (Li and Chen, 1993). As children function as an important care provider for the elderly in China, the function for old age support is inevitably undermined for *shidu fumu*. Such bereaved parents may have very little support in their old age, especially in circumstances where their savings may have been disproportionately invested in the education of their only child (Mu, 2009). As we will discuss in greater depth in the Discussion section below, *shidu fumu* tend to rely on financial

assistance from government, but the compensation level for families is relatively low<sup>1</sup> (Zhang and Jiang, 2012; Ou and Li, 2012).

As already noted, the effects of bereavement are felt at different intensities across the lifespan (Rubin and Malkinson, 2001). There are clearly differentials with grief and the effect of child-loss which may be related to the developmental stage of the bereaved (adults and children), the role each one has in the family, as well as gender, cultural and personality differences (Martin and Doka, 2000). Mothers, for example, are more likely to connect directly to their raw feelings, responding to the death through the experience and expression of strong emotion (Levav, 1989). As well as life-course position, a longitudinal study to examine the relative impact of major variables on grief and depression among bereaved parents following the death of their child showed that depression was predicted by individual factors of both the parents (e.g. gender, religious affiliation and professional help seeking and grief) and their child's age, cause/unexpectedness of death and number of remaining children (Wijngaards-de Meij et al., 2005). Despite this, studies on bereaved parents found that even if they lost a child at a young age, the pain of child loss would continue and haunt them into their old age (Rubin, 1990). While the intensity of grief varies by stages and is related to individual characteristics and context changes, child-loss can have an influence throughout one's whole life (Malkinson and Bar-Tur, 2005).

<sup>&</sup>lt;sup>1</sup> On 31 August 2007, National Population and Family Planning Commission, Ministry of Finance, "Notice of National Population and Family Planning Commission and the Ministry of Finance on Printing and Distributing the Pilot Scheme of the Support System for Families with a Single Child Who is Injured, Disabled or Dead" (NPFPC G [2007] No. 78), the national compensation level for only-child bereaved parents is 100 RMB or above per person per month. On 26 December 2013, National Population and Family Planning Commission "Circular of the National Health and Family Planning Commission and Four Other Departments on Further Implementing the Support of Households with Special Family Planning Difficulties" (NHFPC G [2013] No. 41), increased the standard compensation to 340 RMB per person per month for urban couples and 170 RMB for rural couples. This could be adjusted according to local situation.

To recap, we can make three clear points from this literature review. First, because of the unique demographic history of China there are around 145 million only-child families. While mortality is relatively low, the large size of the national population translates these into a significant number of couples who have lost their only child and are now beyond reproductive age. Given the reported normalisation of small family sizes in China and the forecast low-fertility there, such *shidu fumu* are likely to form a more important element of the population. The visibility of *shidu fumu* as a community has increased, as have their demands for governmental assistance, especially in the context of heavy reliance on child support in older age.

Secondly, while many studies have focussed on the impact of child-loss upon parents, relatively few have considered the impact of only-child loss. Because of the demographic circumstances highlighted above, these studies have primarily emanated from China. These studies have identified the serious impact of child-loss on *shidu fumu* concerning both physical and psychological health (Li and Wang, 2008; Ou and Li, 2013) as well as withdrawal and exclusion from society (Zhang and Jiang, 2012; Zhang and Shao, 2013). Most of these studies, however, are based on media reports and individual interviews, and either focus on the description of only-child lost parents' emotional dynamics, or policy suggestions for bereaved parents based on the understanding of their difficulties. There has been little systematic and empirical research on this topic.

Thirdly, evidence from previous studies suggest likely differentials in the experience of child-loss based upon both macro- and micro-level variables, which could be further investigated. In the Chinese context, however, very little attention has been given in the previous literature to such differentials.

These three points together provide the rationale of this paper. We use survey data from a large Western Chinese city to examine 'wellbeing' among *shidu fumu*. The research questions, therefore, are as follows: What are the characteristics of 'wellbeing' among *shidu fumu*? What differences exist in measured 'wellbeing' between *shidu fumu* and non-bereaved parents? What differences exist *between shidu fumu* in terms of 'wellbeing'? Based on the literature, the paper hypothesises (H1) that bereavement of an only child impairs the physical, psychological and economic wellbeing of parents as well as their social support and old age security. As such, *shidu fumu* are more vulnerable than those parents without such bereavement. The second hypothesis (H2) is that there are differentials in wellbeing *between shidu fumu* as characteristics of parents and the deceased child each exert different effects on their wellbeing.

Before defining wellbeing, we should first justify the comparison between *shidu fumu* and non-bereaved parents as, it could be argued, a more fruitful comparison might be between *shidu fumu* and families who have lost one of their two children. As we discuss in the Data and Methods section below, the survey under analysis here covers Xi'an, a large city in Shaanxi Province. In common with almost all urban centres in China, Xi'an was covered by the so-called 'one-child policy', under which women were only allowed to bear one child unless there existed certain particular circumstances (e.g. the first child was born disabled). This means that the population from which to draw a sample generally only has one child. While this is a limitation in many ways, only a nationwide survey or one that compares areas with two very different family planning regimes would allow for such a comparison. While we reflect upon this again in the Discussion and Conclusion section below, we believe that given the dearth of empirical investigations of the characteristics of *shidu fumu* and their increasing demographic significance this study is still of value.

While 'wellbeing' is certainly a very broad construction, it has a useful meaning in the Chinese context, where it includes not only the economic aspects of life, but also non-economic factors such as health, social relationships and the quality of environment measured objectively or subjectively (Doraid, 1997; He and Zhou, 2002; Liu, 2003). As the wellbeing of only *shidu fumu* contains a range of dimensions of living conditions and subjective perceptions including economic conditions, physical and psychological health, and social relationships, we focus on five dimensions, namely physical wellbeing, psychological wellbeing, economic wellbeing, social support and old age security.

#### **Data and Methods**

#### Survey

The paper uses first-hand data from the survey *Development Capabilities of Families Practicing Family Planning in the Context of an Ageing Population* conducted jointly by Xi'an University of Finance and Economics and Xi'an Population and Family Planning Commission in July 2013 in Xi'an. Xi'an is a city of around 8.5 million people in Shaanxi Province, north-west China. Respondents were women (or their spouses) over the age of 49 with non-agricultural household registration (*hukou*) who had lost their only child. The questionnaire included six sections: basic individual information, health status, economic status, social support (practical support, emotional support and social interaction), expectation/need of old age security and family situation.

The survey used a multistage sampling procedure, and a quota non-probability sampling within each stage based on the proportion of *shidu fumu*. The sampling frame was the 1,647 *shidu fumu* where the female of the couple was aged over 49. This was derived from a list of parents provided by the Xi'an Population and Family Planning Commission. The first stage was to select the primary sampling unit. Considering the distribution of *shidu fumu* in Xi'an's

nine districts and four counties, six central districts with relatively high concentrations in the urban areas were chosen, which contained 1,179 *shidu fumu* accounting for 71.6% of those bereaved parents. The second stage was to select sub-districts according to the quota derived from the proportion of *shidu fumu*. Due to the uneven distribution among the six selected districts, we selected 15% of these parents as our sample. In the third stage, 76 parents refused to take the survey, mainly in economically well-developed and prosperous districts, and 17 parents had moved away from their registered addresses. Furthermore, a number of *shidu fumu* were added who were originally not in the survey list. In all we collected 194 valid questionnaires, and the rejection rate was 32.4%.

The 'control group' was defined as parents who had not suffered child-loss (for the reasons outlined above). These were selected from the same communities as the *shidu fumu*. This control group was randomly approached on the streets in the same city districts as the surveyed *shidu fumu*. In total, 367 non-bereaved parents were interviewed. Some parents with more than one child were interviewed as they were eligible to have a second child under the regulations. The rejection rate for non-bereaved parents was about 3%. Ultimately, the survey covered six central districts of Xi'an city, 31 sub-districts, 561 individual samples (367 non-bereaved parents, 282 of which were only child parents, the rest having more than one child; and 194 *shidu fumu*). A small number of supplementary in-depth interviews with bereaved parents and officials from the Family Planning Commission were performed (not reported here). The data used for this analysis was 282 non-bereaved parents with only one child and 194 *shidu fumu*. The majority of *shidu fumu* were distributed within the urban districts, and thus the sample of this survey largely represents the situation of urban *shidu fumu*.

#### Dependent Variables

The dependent variable is 'wellbeing' as measured by five dimensions based upon previous research into the post-bereavement life course, namely physical wellbeing, psychological wellbeing, economic wellbeing, social support and old age security. The details of the dependent variables can be found in Table 1.

## Table 1 Here

#### Independent Variables

Independent variables consist of individual characteristics of the respondents and of the deceased child. Characteristics of the respondents include: whether the respondent lost his/her only child, gender, age (below 60, and aged 60 and above), educational level (junior high school and below, senior high school and above), chronic diseases (having, not having) and income of the couple. The characteristic variables of the deceased child include: gender, age (age of 18 and above, below age of 18), duration since death (less than 5 years, and 5 years and above) and cause of death (illness or others – such as accident).

#### Method

This article concentrates on the characteristics and differences of the five dimensions of wellbeing of *shidu fumu* through comparison both between them and with other, non-bereaved parents. Binary logistic regression models were used to analyse mainly categorical variables in the dimensions of 'wellbeing', such as self-rated health, and whether having chronic disease in the physical wellbeing dimension, economic confidence in the economic wellbeing dimension, and perception of old age care in the old age security dimension. OLS regression models were employed to examine some continuous variables in wellbeing, such as levels of depression and satisfaction with life in the psychological wellbeing, annual

income in the economic wellbeing and the size of three types of support networks under social support dimension.

The ethics of the survey and study were approved by Xi'an Population and Family Planning Commission.

## Results

#### Descriptive statistics

As Table 2 demonstrates, 'only-child lost parents', or *shidu fumu*, report statistically significant differences on each dimension of 'wellbeing' compared to non-bereaved parents, with the exception of social support networks and annual income. *Shidu fumu* report lower levels of physical and psychological wellbeing and experience higher levels of depression. 73% of *shidu fumu* are affected by chronic diseases, while 22% consider themselves as having good health. The two indicators for psychological wellbeing suggest that the average level of depression for *shidu fumu* is 10.36 (the maximum value of the scale is 18) and is significantly higher than that of non-bereaved parents. The scores on satisfaction with life (SWL) for *shidu fumu* are only half those of non-bereaved parents.

*Shidu fumu* tend to have lower levels confidence about the family's future economic situation. Even though both types of family have similar annual income levels, 74% of *shidu fumu* report a negative expectation of their economic future. In terms of old age security, government-sourced care for the elderly is given more emphasis by *shidu fumu*. Besides personal pensions, 27% of *shidu fumu* expect the government to partly fund their old-age maintenance, compared to 11% of non-bereaved parents.

## Table 2 here

Differences in wellbeing between shidu fumu and non-bereaved parents

Table 3 shows the multiple regression results of the impacts on wellbeing after controlling for other independent variables. In general, there are profound differences in all wellbeing dimensions for *shidu fumu* compared with non-bereaved parents. The likelihood of having chronic diseases is 2.88 (Exp (1.057) =2.88) times that of non-bereaved parents, and the likelihood of self-rated good health is roughly half [0.456 (Exp (-0.785) =0.456)] that of non-bereaved parents. *Shidu fumu* also experience levels of depression five times higher than non-bereaved parents and report around one-seventh the satisfaction with life. *Shidu fumu* tend to hold a pessimistic view of the future and are more likely to expect government support for elderly care. The differences between both types of parent in social support are significant. The support networks for *shidu fumu* are smaller (generally about two people), demonstrating that bereaved parents receive significantly less social support.

## Table 3 here

Some demographic characteristics of individuals, such as age, education level, income level and chronic disease status also have a significant impact on different dimensions of wellbeing. The older parents are, the more likely they are to have chronic disease, but the better they are in terms of psychological wellbeing, economic wellbeing and level of social support. A higher level of education could also result in higher income and social support. Income level is positively related to psychological wellbeing. The overall wellbeing for elderly with chronic diseases is worse than for the younger cohort, as well as having lower scores in health condition, economic confidence and satisfaction with life.

It is important to note that the above individual characteristics have no influence on opinions about old age security. This provides further evidence that bereaved parents have a more urgent need for government support in elderly care. Except for the mentioned findings, other individual characteristics do not statistically significantly influence wellbeing.

#### Differences in wellbeing within shidu fumu group

Although *shidu fumu* have similar experiences, Table 4 demonstrates that their wellbeing varies by the characteristics of the *shidu fumu* and by the features of the deceased child.

## **Table 4 Here**

In terms of the characteristics of the *shidu fumu*, those respondents who are younger, have a lower education level, lower income and chronic diseases are significantly more vulnerable than other bereaved parents. Compared to the younger cohorts, older parents within the *shidu fumu* group tend to have better levels of psychological wellbeing, income levels and emotional support; possibly suggesting that the influence of only-child loss on wellbeing may become weaker as time goes by. Another positive correlation is found between education level and social interaction, which could be explained in terms of the better educated elderly finding more appropriate ways to adjust to the loss and being able to communicate with other elderly people more easily. Usually *shidu fumu* with higher incomes would score higher in the health status self-assessment, and are more independent in terms of old age security, as compared with low-education and low-income elderly.

When it comes to the characteristics of the deceased child, *shidu fumu* who have lost their only *son* have the lowest level of wellbeing by a number of measures: the son is the only descendant of the family through the Chinese tradition of son preference. The probability of having a poor health assessment in 'daughter-lost' parents is only 38.1% (Exp (-0.965) =0.381) of the 'son-lost' group (statistically significant even after controlling for parents' age), which means 'son-lost' parents are more vulnerable to health problems and may suffer more physical and psychological trauma. As well as this, 'son-lost' parents are less willing to communicate with others, and as a result they receive significantly less social support. The

13

characteristics of the deceased child, such as whether the child was grown-up at death, the cause of death and the length of time since death, are not statistically significant correlated to the wellbeing of *shidu fumu*. This may indicate that the loss of an only child deals a heavy blow to parents irrespective of the characteristics of the deceased child.

#### **Discussion and Conclusion**

After more than three decades of stringent birth control policy, China has accumulated around 145 million only children, and more than 1 million parents who have lost their only child and are now unable to reproduce – a group known as *shidu fumu*. Older parents face a not negligible risk of losing their only child, and *shidu fumu* and families have attracted much attention (Jiang et al., 2014). This article analyses the current wellbeing differences between *shidu fumu* and non-bereaved parents, as well as differences within bereaved parents in China using a new large-scale survey. The findings are as follows.

The paper finds strong support for hypothesis 1. Consistent with previous studies (Li and Wang, 2008; Gu and Cai, 2011; China National Committee on Ageing, 2013; Ou and Li, 2013), the paper finds that bereaved parents are statistically significantly vulnerable in terms of physical and psychological wellbeing compared to non-bereaved parents. Bereaved parents are more likely to report poorer health in self-rated health assessments, more likely to have chronic diseases and have a higher level of depression.

Moreover, the paper finds that bereaved families have less support in terms of practical support, emotional support and social interactions, and smaller social support networks. Bereaved parents are more likely to expect governmental funding for their old age support, as they ascribe their childlessness (as a result of the loss of the only child) to their compliance with the family planning policy.

With regard to hypothesis 2, the paper finds partial support. Parental characteristics are correlated with their wellbeing. Parents of a younger age, lower education level and income level and with chronic diseases are significantly more vulnerable in terms of wellbeing. Lower income families tend to expect more from the government. Elderly of a younger age or with chronic diseases have lower psychological wellbeing.

In terms of the characteristics of the deceased child, contrary to extant literature (Wijngaards-de Meij et al., 2005), this article finds no statistically significant correlation between parental wellbeing and the deceased child's characteristics such as age, and the length of time since death, and cause of death. This may mean that, in the context of Chinese – society characterised by a traditional family ideology and only one child – the loss of an only child is a heavy and everlasting grief for parents, irrespective of the characteristics of the deceased child.

The study has a number of limitations. First, by not comparing *shidu fumu* with parents who may have lost one child but had one surviving, we have not been able to adequately measure this precise phenomenon in an ideal setting. However, as we observed earlier, given the history of China's family planning regime, the study of families in urban China is, by default, generally a study of one-child families. Studies of projected Chinese fertility suggest that one-child families may become a new social norm. Comparing the experiences of Xi'an's *shidu fumu* with rural areas would have added a further level of uncertainty given the different familial roles in the two settings. Despite this, we recognise this as a clear limitation of the study. Secondly, the survey instruments did not enable us to explore in great depth the broader exchanges of social capital and *quality* of social networks, including the role of 'in-law' families, neighbours and fellow *shidu fumu*. As noted earlier, a small number of supplementary in-depth interviews with bereaved parents and officials from the Family

Planning Commission were performed. Further research is planned to build on the findings of this article by developing a large-scale qualitative study of support for *shidu fumu* to allow for a better understanding of the day-to-day needs of such parents.

As noted in the Introduction, the plight of the shidu fumu is a developing feature of Chinese discourse on health and social welfare. Shidu fumu tend to rely on the government for financial assistance, but the compensation offered is relatively low (340 RMB per month for urban couples and 170 RMB per month for rural couples) (National Population and Family Planning Commission, 2013; Ou and Li, 2013; Zhang and Jiang, 2012). On 5 June 2012 around 80 such parents gathered at the National Population and Family Planning Commission of P.R.C. and proposed on behalf of more than 2,000 shidu fumu, who had signed the petition stating that the government should provide them with economic compensation for their loss, as well as the establishment of shidu fumu-oriented communities with low rent and the designation of a specific department for such parents to turn to when help was needed (Huang, 2012; Li, 2012). The petitioners received no formal reply from the National Health and Family Planning Commission (renamed from the National Population and Family Planning Commission in 2013) for almost two years. On 21 April 2014, more than 240 parents from across the country gathered at the National Health and Family Planning Commission of P.R.C. for an official discourse. The Commission acknowledged their contribution as family planning practitioners, but refused their request, stating that there is no legal basis to support their requirement for administrative compensation (Ba, 2014).

A number of national and municipal assistance policies for *shidu fumu* have been introduced since 2007. In August 2007, the National Population and Family Planning Commission and Ministry of Finance jointly released the *Pilot Program for Assisting Only* 

*Child Lost Families*, demanding provincial and local governments provide a compulsory financial assistance of 80 RMB per month to *shidu fumu*. Following this national programme, provinces localised their policies. In December 2013, five ministries including the National Population and Family Planning Commission, Ministry of Finance and Ministry of Civil Affairs issued *A Notice on Further Assistance to Vulnerable Families due to Family Planning*, stipulating that a higher standard of monthly financial support from 2014 (340 RMB per month for urban parents and 170 RMB per month for rural parents) should be allocated to parents whose only child died. Furthermore, *shidu fumu* should have prioritised access to local nursing homes.

The paper suggests that this support for *shidu fumu* generally falls short. First, most programmes only propose providing *structural* support such as cash allowances and prioritised access to nursing homes. As we have shown, the needs of this demographically significant group of parents go far beyond these structural needs in terms of psychological wellbeing and social support networks. Secondly, given the importance attached to filial obligation in Chinese old-age security and wellbeing (Cheng and Chan, 2006), coupled with the inadequate general coverage and quality of nursing homes in China (Chu and Chi, 2008) the levels of these structural interventions are highly likely to be inadequate in themselves.

*Shidu fumu* can be viewed as the bearer of the risks caused by family planning policies. While there are many one-child parents around the world, only China has seen this higher-risk family formation typology prescribed by law. In the case of parents who have lost their only child and are no longer able to produce offspring, it is possible to argue that the government may have a moral obligation to support such couples – especially when their fertility *desires* may have been curtailed by the family planning policy.

### References

- Ba, R. (2014). National Health and Family Planning Commission officially replies to only child lost families (Chinese). In *fawan.com*. Retrieved 24 March 2015, from http://www.fawan.com.cn/html/2014-04/26/node\_30.htm.
- Basten, S. and Jiang, Q. (2014). China's family planning policies: Recent reforms and future prospects. *Studies in Family Planning*, 45(4), 493–509.
- Cheng, S. T. and Chan, A. C. (2006). Filial piety and psychological well-being in well older Chinese. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61(5), 262–69.
- China National Committee on Ageing. (2013). *The elderly lost their only child: Who can provide old age supporting for us?* (Chinese). Beijing: China National Committee on Ageing.
- Chu, L. W. and Chi, I. (2008). Nursing homes in China. *Journal of the American Medical Directors Association* (Chinese), 9(4), 237–43.
- Diener, E. D., Emmons, R. A., Larsen, R. J. and Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75.
- Doraid, M. (1997). Analytical tools for human development. In: *United Nations Development Programme (UNDP)*. Retrieved 24 March 2015, from http://www.undp.org hdroanatools.htm.
- Dyregrov, A. and Gjestad, R. (2011). Sexuality following the loss of a child. *Death Studies*, 35(4), 289–315.
- Gu, B. and Cai, Y. (2011). Fertility prospects in China. UNPD Expert Papers. New York: United Nations Population Division.
- Hare-Mustin, R. T. (1979). Family therapy following the death of a child. *Journal of Marital and Family Therapy*, 5(2), 51–59.
- He, C. and Zhou, C. (2002). The concept of wellbeing and indexes of life quality The set of

European life quality index system. Social Science Abroad (Chinese), 25(1), 51–59.

Huang, J. (2012). Losing their only child. In: Global Times (Chinese).

- Jiang, Q., Li, Y. and S ánchez-Barricarte, J. J. (2014). The risk of mothers losing an only child in China. *Journal of Biosocial Science*, 46(4), 531–46.
- Jiang, Q., Li, X. and Feldman, M. W. (2015). Bequest motives of older people in rural China--From the perspective of intergenerational support. *European Journal of Ageing*. FirstView doi: 10.1007/s10433-014-0330-z.
- Levav, I. (1989). Second thoughts on the lethal aftermath of a loss. *OMEGA Journal of Death and Dying*, 20(2), 81–90.
- Li, L. and Wang, X. (2008). Devoting much attention to spiritual solace of families with accidental death of only child. *Population and Development* (Chinese), 29(6), 28–30.
- Li, Y. (2012). Bereavement of parents lost their only child. In: Southern Metropolis Weekly (Chinese). Retrieved 24 March 2015, from http://www.nbweekly.com/news/special/201207/30569.aspx
- Li, Y. and Chen, J. (1993). Family oriented, individual oriented, and peasant fertility ideology. *Sociological Studies* (Chinese), 8(2), 87–96.
- Liu, J. (2003). Way of life and quality of life: Special perspective of Chinese social welfare research. *Journal of Central China Normal University* (Chinese),42(2), 57–62.
- Malkinson, R. and Bar-Tur, L. (2005). Long term bereavement processes of older parents: The three phases of grief. *OMEGA – Journal of Death and Dying*, 50(2), 103–29.
- Martin, T. L. and Doka, K. J. (2000). *Men don't cry, women do: Transcending gender stereotypes of grief.* Abingdon: Psychology Press.
- Mu, G. (2009). Protection of rights and interests and risk aversion of only child family. *Southern Forum* (Chinese), 8(3), 14–21.

- National Population and Family Planning Commission and Ministry of Finance. (2007). Notice of National Population and Family Planning Commission and the Ministry of Finance on printing and distributing the Pilot Scheme of the Support System for Families with a Single Child Who is Injured, Disabled or Dead (Chinese). Beijing.
- National Population and Family Planning Commission. (2013). *Circular of the National Health and Family Planning Commission and four other departments on further implementing the support of households with special family planning difficulties*(Chinese). Beijing: National Population and Family Planning Commission.
- Nolen-Hoeksema, S., Larson, J. and Larson, J. M. (1999). *Coping with Loss*. Abingdon: Routledge.
- Ou, Y. and Li, C. (2013). Crisis intervention and case management: An application to only child bereaved parents. *Journal of Social Work* (Chinese), 26(4), 86–154.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385–401.
- Rostila, M., Saarela, J. and Kawachi, I. (2012). Mortality in parents following the death of a child: A nationwide follow-up study from Sweden. *Journal of Epidemiology and Community Health*, 66(10), 927–33.
- Rubin, S. S. (1990). Death of the future? An outcome study of bereaved parents in Israel. *OMEGA – Journal of Death and Dying*, 20(4), 323–39.
- Rubin, S. and Malkinson, R. (2001). Parental response to child loss across the life-cycle:
  Clinical and research perspectives. In *Handbook of bereavement research: Consequences, coping and care* (pp. 219–40). Washington, D.C.: American
  Psychological Association Press.
- Sanders, C. M. (1979). A comparison of adult bereavement in the death of a spouse, child, and parent. *OMEGA Journal of Death and Dying*, 10(4), 303–22.
- Talbot, K. (1996). Mothers now childless: Survival after the death of an only child. *OMEGA Journal of Death and Dying*, 34(3), 177-189.

- Van der Poel, M. (1993). Delineating personal support networks. *Social Networks*, 15(1), 49–70.
- Wang, G., Guo, Z. G. and Guo, Z. W. (2008). A preliminary estimation on the quantity of the mothers with disabled and dead one child. *Chinese Journal of Population Science* (Chinese), 22(1), 37–42.
- Wang, G. (2009). Aggregate structure and developing trend estimation of only children in China. *Population Research* (Chinese), 33(1), 10–16.
- Wang, G. (2013). Only child bereaved family and its developing trends under the current family planning policy. *Chinese Journal of Population Science* (Chinese), 27(1), 57–65.
- Wang, J. (2013). Trends in life expectancies and mortality patterns in China since 1990: A further examination and analysis. *Population Research* (Chinese), 37(4), 3–18.
- Wijngaards-de Meij, L., Stroebe, M., Schut, H., Stroebe, W., van den Bout, J., van der Heijden, P. and Dijkstra, I. (2005). Couples at risk following the death of their child: predictors of grief versus depression. *Journal of Consulting and Clinical Psychology*, 73(4), 617–623.
- Youngblut, J. M., Brooten, D., Cantwell, G. P., Del Moral, T. and Totapally, B. (2013). Parent health and functioning 13 months after infant or child NICU/PICU death. *Pediatrics*, 132(5), 1295–1301.
- Zhang, B. and Jiang, L. (2012). The triple dilemma of parents bereaved of only child and the assistance mechanism: A study in eight cities of Hubei Province. *Population and Economics* (Chinese), 33(2), 22–31.
- Zhang, B. and Shao, Z. (2013). "Common feeling" and "feeling of sympathy": Social adaptation mechanism of the only child bereaved parents. *Socialism Studies* (Chinese), 37(2), 91–97.

# Table 1 Indicators and Measurements of Wellbeing

Dependent Variables	Measurements	Values
Physical Wellbeing		
Self-rated Health	Measured by 5-point scale item "Please evaluate your health status", with 5 choices. "Very good" and "good" were merged as "Good"; while "average", "bad" and "very bad" were merged as "Bad".	0, Bad 1, Good
Chronic Diseases <sup>2</sup>	Objective health condition, measured by "Do you currently have any chronic disease". Answers are denoted with "Yes" or "No".	0, No 1, Yes
Psychological Wellbeing		
Level of Depression	Measured by revised Radloff (1977) CES-D scale. This research presented this scale with 3-tier Likert scale including 9 questions.	Scores ranging from 0 to 18. A higher score indicates that the level of depression is higher, which means the worse psychological wellbeing
Satisfaction with Life	Measured by Diener, Emmons, Larsen and Griffin (1985). Scores on the Satisfaction with Life Scale (SWLS). The scale contains five questions with seven tiers. Each answer is denoted with a value, which would be added up to a total score.	Score ranging from 5 to 35. A higher score indicates a higher satisfaction with life.
Economic Wellbeing		
Annual Income <sup>3</sup>	Measured by the total annual income of the couple for last year.	The higher score, the higher income.
Economic Confidence	Measured by the question "Are you confident with your family future income?" Answers are categorised as "Confident" or "Unconfident"	0, Unconfident 1, Confident
Social Support		
Practical Support	Used classification created by Van der Poel (1993), and summarised social support into three	Higher scores, higher practical support.
Emotional Support	dimensions, namely practical support, emotional support and social interaction. The respondents	Higher scores, higher emotional support.
Social Interaction	were asked about the size (population) of each support typology.	Higher scores, higher social interaction.
Old Age Security	11 71 07	
Preference on Income	Measured by "What is your preferable income	0, Saving/Pension
Sources	resource?" Answers were categorised into "Saving/Pension" or "Government funded".	1, Government Fund

 <sup>&</sup>lt;sup>2</sup> Chronic disease is a dependent variable as physical wellbeing, but an independent variable to other dependent wellbeing variables.
 <sup>3</sup> Annual income is a dependent variable as economic wellbeing, but an independent variable to other dependent

wellbeing variables.

Variables	Non-bereaved families		Only Child I	LR/T Test	
Dependent Variables					
	Mean	S.D.	Mean	S.D.	
Physical Wellbeing	(N282)		(N1	94)	
Good (Bad) Health Status	0.48	0.50	0.22	0.42	***
Having (Not Having)	0.45	0.50	0.72	0.45	***
Chronic Diseases <sup>4</sup>	0.45	0.50	0.75	0.45	
Psychological Wellbeing	(N)	282)	(N1	94)	
Level of Depression	4.00	3 21	10.36	3.01	***
(Average)	4.77	5.21	10.50	5.71	
Satisfaction with Life	21.01	678	14.10	636	***
(Average)	21.91	0.78	14.10	0.30	
Economic Wellbeing	(N.	367)	(N1	94)	
Annual Income <sup>5</sup> [RMB]	42857.43	27065.87	37723.13	33288.11	Ns
Confident (Unconfident)	0.55	0.49	0.26	0.44	***
about Economic Condition	0.55	0.49	0.20	0.44	
Social Support			-	-	
Practical Support	3.52(252)	4.94	2.71(161)	3.72	Ns
Emotional Support	2.42(257)	3.07	1.69(150)	2.16	Ns
Social Interaction	2.71(256)	2.93	1.93(142)	2.31	Ns
Old Age Security	(N)	275)	(N1		
Government fund (Saving)	0.11	0.31	0.27	0.44	***
as income source	0.11	0.51	0.27	0.44	
<u>Independent Variables</u>					
	Pei	cent	Perc	cent	
<b>Respondent Information</b>	(N2	282)	(N1	94)	
Female (Male)	72.	25%	59.7	'9%	
Age of 60 and above (age	26	90%	567	/0%	
below 60)	20.	2070	2011	070	
Senior High School and					
above(Junior High School	75.	50%	60.3	81%	
and below)					
Deceased Child			(N1	94)	
Information			(		
Female (Male)			31.4	4%	
Age of 18 and above (Age			73.2	20%	
below 18)					
Duration since death					
5 years and above (less			71.3	31%	
than 5 years)			, 110		
Illness caused bereavement			63.4	0%	
(Other causes)			05.		

# Table 2 Descriptive Information of Variables in the Regression Model

Notes: Significant at \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, +p<0.1; Ns: Non Significant.

 <sup>&</sup>lt;sup>4</sup>Chronic disease is a dependent variable as physical wellbeing, but an independent variable to other dependent wellbeing variables.
 <sup>5</sup> Annual income is a dependent variable as economic wellbeing, but an independent variable to other dependent

<sup>&</sup>lt;sup>5</sup> Annual income is a dependent variable as economic wellbeing, but an independent variable to other dependent wellbeing variables.

	Physica	al Wellbeing	Psychologic	al Wellbeing	Economic	Wellbeing		Social Suppo	ort	Old Age Security
	Chronic Diseases	Health Status Self- Assessment	Level of Depression	Satisfaction with Life	Annual Income	Economic Confidence	Practical Support	Emotional Support	Social Interaction	Elderly Care Preference
Bereaved (Not	1.057***	-0.785**	4.761***	-7.689***	-0.124+	-1.205***	-1.174*	-0.698*	-0.863**	0.935**
Bereaved) Female (Male)	-0.144	-0.286	-0.242	-0.427	0.014	-0.122	0.237	0.151	0.190	0.610*
Age of 60 and above (age below	0.431+	0.223	-0.249	2.434**	0.156*	0.695**	0.689	0.315	0.361	0.122
Senior High School and above(Junior High School and below)	-0.387	0.686*	-0.351	0.315	0.363***	0.550*	-0.113	0.028	0.342	-0.458
Ln Income	-0.189	0.529**	-0.723**	2.223***		0.209	0.586+	0.312	0.286	-0.642**
Having (Not Having) Chronic Diseases		-1.231***	1.144**	-1.616*	-0.084	-0.425*	0.895+	-0.080	0.504+	0.068
Constant	2.121	-5.474***	12.562***	-0.994	10.200***	-2.260	-3.212	-1.016	-0.997	4.372*
-2LL/ R <sup>2</sup>	590.797	533.514	0.382	0.314	0.262	590.131	0.028	0.024	0.033	375.191
Observations	476	476	476	476	476	476	413	407	398	463

<b>Table 3 Regression</b>	Analysis	Concerning the	e Impact of	Only-child Loss of	n Wellbeing
---------------------------	----------	----------------	-------------	--------------------	-------------

Notes: Numbers in table are the Beta coefficient; Significant at \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, +p<0.1.

	Physica	l Wellbeing	Psychologic	al Wellbeing	Economic	Wellbeing		Social Support		<i>Old Age</i> <i>Security</i> Elderly
	Chronic Diseases	Health Status Self- Assessment	Level of Depression	Satisfaction with Life	Annual Income	Chronic Diseases	Practical Support	Emotional Support	Social Interaction	Care Preference
Female (Male)	0.349	-0.190	0.095	-0.961	-0.065	-0.206	0.112	-0.039	0.074	0.808
Age of 60 and above (age below 60)	0.528	-0.111	-0.777	2.733**	0.178	1.210**	0.024	0.775*	0.382	-0.403
Senior High School and above (Junior High School and below)	-0.467	0.938*	0.028	0.625	0.274*	0.753+	-0.008	0.339	0.500+	-1.033*
Ln Income	0.171	0.620*	-0.175	1.894**		0.088	0.653+	0.108	0.097	-0.663**
Having (Not										
Having) Chronic Diseases		-1.279**	2.107**	-1.599	0.093	0.125	0.517	-0.145	0.046	0.380
Deceased Child										
<i>Information</i> Female (Male)	-0.227	-0.965*	0.642	-1.475	-0.169	-0.360	-1.050+	-0.970*	-0.880*	0.324
Age of 18 and above (Age below 18)	-1.115+	0.146	0.595	0.933	-0.203	0.673	2.029*	-0.021	0.049	-1.044
Duration of 5 years and above (less than	0.203	-0.551	-0.561	0.885	0.104	-0.174	0.614	0.060	0.113	-0.183
5 years) Illness caused										
bereavement (Other	-0.333	0.141	-1.072+	1.589	0.033	0.579	0.128	-0.176	-0.519	-0.727
causes)										
Constant	-0.421	-6.372*	11.334**	-6.097	10.074***	-3.091*	-4.535	0.852	1.210	6.112*
-2LL/ K <sup>2</sup>	204.166	173.608*	0.085	0.142	0.064	203.389	0.084	0.080	0.067	185.219
Observations	194	194	194	194	194	194	101	150	142	100

<b>Table 4 Regression</b> A	Analysis – Impacts o	f Variables on <i>shidu</i>	fumu
9	•/		./

Notes: Numbers in table are the Beta coefficient; Significant at \*\*\*p<0.001, \*\*p<0.01, \*p<0.05, +p<0.1.