DRAFT (10/11/2013)
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Individual and province inequalities in health among older people in China: evidence and policy implications

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Abstract

Improvements in life expectancy in China over the past 50 years, combined with marked declines in fertility, have resulted in rapid population ageing, reflected in both an increase in the absolute and relative number of older people in the population. The growth in the number of people surviving to old age presents a challenge for the design of adequate and effective social policies in health and social care (Cai et al. 2012; Woo et al. 2002). Understanding the patterning of the health outcomes (physical, subjective rated health, life stratification and subjective rated memory) of older people is essential to inform the design and delivery of appropriate services.

Using data from the first wave of the nationally-representative Chinese Health and Retirement Longitudinal Study (CHARLS), this paper examines a range of indicators of the health status of older people (aged 50 and over) in China, including disability (difficulty with performing various activities of daily living), physical health (self-reported health), perceived life satisfaction and self-reported memory. Existing research has highlighted that both individual and province-level factors contribute to inequalities in self-reported general health among older people in China (Feng et al. 2012), with province level effects reflecting regional diversity in the extent of welfare provision and the demographic and socio-economic

composition of the population. This paper therefore investigates the characteristics associated with the risk of poor health among older people, including individual characteristics (e.g. marital status), household characteristics (e.g. self-rated standard of family living, and receipt of Dibao by the household) as well as the characteristics of the provinces in which the older person lives (e.g. availability of health care services), along with province level information (e.g. expenditure on healthcare). Multi-level modelling is utilised in order to separate out the relationship between contextual and individual level factors.

This research raises policy-relevant questions about the availability and appropriateness of health services for older people in different parts of China, particularly those living in rural areas. Considering the pace of population ageing and economic growth, this paper contributes to our better understanding of the policy changes necessary to protect the wellbeing of older people in the future.

Introduction

The effect of individual characteristics on health status

A large body of existing literature from Europe and North America has evidenced the association between a range of demographic and socio-economic characteristics and an individual's health status; however such research evidence is still scarce in the Chinese context. The Marmot Review (2010) in the British context revisited the strong link between socio-economic status and the reporting of poor health status, while evidence from other countries of the developed world is compatible (Hay, 1988; House et al, 1990). Although the direction of the causal mechanism between poor socio-economic status and poor health status is the subject of on-going research and debate, the evidence of the association between the two concepts, regardless of the way they are operationalised in empirical research (eg. socio-economic status as individual income, and health status as self-reported health), is not disputed. The evidence in the Chinese context is still relatively scarce, and also presenting a more complex picture as a result of the particular socio-political factors which have shaped demographic patterns, the provision of healthcare services and access to such services alike. For instance, Liang et al (2000) examined this relationship in the Wuhan province and found a socio-economic gradient in the report of poor health status, with individuals in lower socio-economic classes being more likely to report poor health than those in higher classes. More recently, Zimmer and Kwong (2004) found that more 'traditional' socio-economic indicators such as income and education, were relatively weak predictors of the report of poor health status, while banks savings and pension eligibility indicateded a stronger effect. Finally, Lowry and Xie (2009) argue that although socio-economic status is positively and strongly associated with health status for individuals in younger ages, such an association is weaker in the latter part of the life course.

The effect of province characteristics on individuals' health status

Contextual and compositional effects on individuals' health status have been evidenced by previous research (e.g. neighbourhood effects (Becares et al, 2012), deprivation (Jones et al, 2000), income inequality (Feng et al, 2012)). The interaction of such factors is important to examine as China is highly spatially differentiated in terms of its economic development and social security, resulting in variability in the quality and availability of health facilities between provinces. Previous studies have found that income inequality is strongly associated with the reporting of poor self-rated health among elderly persons (Feng et al, 2012), and that there was no evidence of a significant improvement in the health of elderly persons living in provinces with better health facilities (Feng et al, 2013). In an earlier study, Yin and Lu (2007) found that the prevalence of medical conditions at the province level had an impact on elderly persons' report of disability, defined as difficulty with specific Activities of Daily Living (ADLs).

This paper aims to contribute to the literature by investigating the health outcomes of older people in China and examining the extent to which these outcomes are influenced by individual and province level characteristics. The paper addresses the following central research question: how does the health of older people vary according to demographic characteristics, socio-economic indicators, health risk behaviours, household/family factors and provincial level factors? The next section discusses the data and methods to be used. The results of a series of multivariate regression models are then presented, followed by a discussion of the results, drawing out the implications for policy makers.

Data and methods

Data

The analysis in this paper combines data from two different sources to explore the impact on the health of older people of individual, family/household and province level characteristics. The province information used in the analysis of this paper comes from the Chinese statistics yearbook in 2012. Nineteen variables were chosen to reflect the contextual effects of each province including urbanisation, economic development, marketisation, spending on health care, health facilities and quality of living (Table 1).

(Table 1 about here)

The individual and family level data are from the wave 1 of the national baseline of the China Health and Retirement Longitudinal Study (CHARLS) conducted in 2011-2012. The CHARLS survey covers 450 villages/urban communities in 150 counties/districts, located in 28 provinces across the country[1]. It is based on a randomly selected sample of people aged 45 and over in the household. Having identified households that include an eligible member (age 45 and over), he/she was defined as the main respondent. Where the household had more than one age-eligible member, the respondent was randomly selected. The data used in this study includes 10,717 interviewees aged 50 and above with complete responses. The dataset has a natural hierarchal structure with individuals nested within families/households within provinces.

Five health indicators are considered: disability (difficulty performing Activities of Daily Living (ADLs) or Instrumental Activities of Daily Living (IADLs)), subjective health status

[1] China includes a total of 31 provinces, however the provinces of Xizang (Tibet), Ningxia and Hainan are not included in this survey.

(self-reported health (SRH)), perceived life satisfaction and self-reported memory)[2]. The indicator of difficulty with ADLs includes the six basic activities of dressing, bathing, eating, getting into/ out of bed, using the toilet, and controlling urination and defecation. The response categories in this indicator were: No difficulty at all; Have difficulty but can still do it; Have difficulty and need help; and Cannot do it even with help. Approximately 82 per cent of the respondents reported no difficulty at all with *any* of the six ADL. Therefore, a binary variable was constructed after counting the number of ADLs a respondent reported difficulty with, with zero representing no difficulty at all for any of the six ADLs, and one representing any difficulty with any of the six ADLs. A similar process was followed for the indicator of difficulty with any of the five IADLs [3]. Self-reported health is a subjective report of one's health, and is reported on the following scale: very good, good, fair, poor, or very poor. A derived variable was constructed with 'positive' categories in the first category (very good or good), fair in the second category, and 'negative' categories in the third (poor and very poor). This process was also used for the construction of derived variables for the indicators of life satisfaction and self-reported memory. The distribution for these health indicators across the sample is shown in Table 2.

The predictor variables are categorised into three groups: firstly, individual demographic, socio-economic, social security and health behaviour characteristics (age, gender, marital status, urban/rural residence, education, income sources, has/has not medical insurance and smoking status); secondly, household/family characteristics (self-rated living standards, and

[2] A sixth outcome indicator was tested in the analysis (report of difficulty with mobility functions), however this model did not produce significant results (see Appendix 1 and 2).

[3] There are five questions in the CHARLS dataset relating to experiencing difficulty with IADLs, doing household chores; preparing hot meals and shopping; shopping for groceries; managing your money (e.g. paying your bills, keeping track of expenses, or managing assets); and taking medications.

whether the household receives Dibao[4]); and thirdly, the province-level variables. The distribution of individual variables across the sample is shown in Table 2.

(Table 2 about here)

Methods

Nineteen variables are chosen to reflect the province characteristics, and some of these variables are highly correlated (e.g. the correlation between the percentage of urban population in a province and GDP per capita is 0.935). This indicates significant multi-collinearity in the model. Thus, in order to capture overall province characteristics, we used factor analysis to generate a summary factor score for each province (Johnston, 1978). The results of this factor analysis are discussed in the Results section below.

Since the dataset has a natural hierarchal structure with individuals nested within provinces and the aim of this paper is to analyse the effects of individual characteristics and province characteristics on the health indicators simultaneously, multilevel logistic regression models are appropriate (Hox, 2002). In terms of the different number of categories in the health indicators, binomial logistic regression is used to examine the determinants of reporting difficulty with ADLs and IADLs, while multinomial logistic regression is used to examine the determinants of self-reported health, life satisfaction and self-reported memory. All the models were estimated using the MLwiN 2.27 software (Rasbash et al., 2009). Since there are only 28 provinces representing higher level units, Bayesian Markov Chain Monte Carlo

[4] Dibao is a means-tested benefit received by the household, which represents a Minimum Livelihood Guarantee. The benefit varies between urban and rural areas as well as different provinces. It was approximately 330 Chinese Yuan per month (about US $ 47) in urban areas and 172 Chinese Yuan (about US $ 24) in rural areas in 2013. In Shanghai (one of the most developed province), the Dibao is 570 (US $ 81) and 430 (US $ 61) respectively for urban and rural residents (People.com, 2012; the central People's Government of the People's Republic of China, 2012).

estimation is used as it can decrease the inherent bias associated with using maximum-likelihood procedures for binary/multinomial models (Browne and Draper, 2006).

Results

Province characteristics

The factor analysis of the 19 variables at province level generated three factors based on the number of the Eigenvalue that exceeds 1.0, with a communality of 78.8 per cent, which means that the majority of observed variances of the data could be explained by these three factors. Sorted rotated factor loadings and communalities for the variables are shown in Table 3. Factor loadings of less than 0.6 (only 36 per cent of variance in common) were set to 0.

(Table 3 about here)

From Table 3, it can be seen that 52 per cent of the observed variability of the original variables is accounted for by factor 1. This factor was labelled as a province being 'Developed, marketised and lower level of spending on health care and lower provision of health facilities (D&M)', since it refers to provinces with a higher level of urbanisation, GDP per capita, migrant rates, average income, VAT per capita and foreign investment, a higher proportion of private or foreign and overseas Chinese industry employees, but a lower proportion of state-own employees, lower expenditure for medical and health care in total revenue of province and a low level of health care institutions per 10,000 population. Approximately 16 per cent of the observed variance is accounted for by factor 2. This factor was labelled as 'Higher level of health facilities and quality of life (HLQ)', since it represents a higher number of health care facilities and lower Engel's coefficients in urban and rural areas. Finally, approximately 10 per cent of the observed variance was accounted for factor 3,

which was labelled as ‘Strong state influence and social security (SSI)’, reflecting provinces which have a higher proportion of state owned enterprises in the total of fixed asset investment and higher percentage of expenditure for social safety net.

Table 4 presents the factor scores for the provinces. From the labelled factors, it is possible to categorise the province characteristics. For the first factor (D&M), Shanghai is the most developed and marketised with lower health care and facilities province, compared to Hebei which is the least developed one. In terms of the second factor (HLQ), Beijing shows the best quality of life and better health facilities, while Yunnan shows the worst one. In terms of Strong State Influence, Qinghai has the strongest state influence and social security, while Shandong is the province with the weakest state influence and social security. In order to have a clearer visualisation of the distribution across these factors, Figures 1A to 1C map the three factor scores for each province with darker colours representing a higher factor score. There is a clear pattern showing coastal regions (Shanghai, Beijing, Tianjin, Guangdong, Zhejiang and Fujian) as the most developed and marketised with poor health care and facilities provinces (Figure 1A), compared to Central and western regions (Xinjiang, Gansu, Inner Mongolia, Sichuan, Yunnan, Guizhou), Northeast regions (Heilongjiang). Xinjiang, and north and northeast regions (Neimenggu, Heilongjiang, Jilin and Liaoning) and Beijing score higher in terms of health facilities and life quality than the southern regions (Figure 1B). Finally, Qinghai, Gansu and Shanghai are high in terms of ‘Strong state influence and social security (SSI)’ (Figure 1C).

(Table 4 about here)

In order to have an understanding of the distribution of older people across China, Figure 1 also shows the percentage of 65+ year old people (Figure 1D) in each province, indicating that Shandong, Jiangsu, Liaoning and Sichuan are the 'oldest' provinces in the country. This shows also that the highest concentration of older people in China tends to be in central and eastern provinces, where provinces report a high degree of marketization and economic development, coupled with a relatively low level of healthcare services, both of which can impact on the health status of older people.

(Figure 1 about here)

Multilevel analysis results

Table 5 brief summarizes the significant effects of predictors on the health outcomes. In this study, there is only a linear relationship between age and some health outcomes (no quadric effects are found). Educational qualification and smoking status have significant effects on all health outcomes, while only two significant effects of whether having medical insurance are found on IADLs and self-reported health. There are some significant effects of province characteristics on ADLs, Life Satisfaction and Self-reported memory.

(Table 5 about here)

Tables 6-7 present the results for the binary multilevel logistic regression models of reporting difficulty with ADLs and IADLs, while Tables 8-10 present the results for the multinomial multilevel logistic regression models of self-reported health, life satisfaction and self-reported memory. All the results are shown as odds ratios. In order to compare between the effects of individual and household characteristics and province characteristics on health outcomes, the

tables present two sets of results: one shows the individual and household effects, and the other shows the additional contribution of province effects.

In terms of the effect of individual characteristics on one's difficulty with ADLs, Table 6 highlights that individual demographic characteristics have an effect, with the risk of reporting such difficulty increasing by age, as every year of age increases the odds of reporting a difficulty with an ADL by 0.05. Females are 35% more likely to report a difficulty with ADLs than males, however there are no substantial differences according to marital status. Variables reflecting one's socio-economic status are an important part of the determinants of reporting difficulty with ADLs. Individuals living in rural areas are more likely to report difficulty with ADLs than urban residents (ORs=1.44), while those with higher educational qualifications (high school and above) are associated with a lower risk of reporting difficulty with ADLs. Income sources are also important in explaining difficulty with ADLs, as individuals receiving income from wages are the least likely to face a risk of difficulty with ADLs compared to individuals receiving income from other sources, while the receipt of Dibao by the household was strongly associated with the report of difficulty with ADLs. No substantial differences are found between individuals having medical insurance or not.

The subjective economic status of the family also contributes to one's individual risk of reporting difficulty with ADLs, as those who rated their standard of living as low showed higher odds than those reporting a high standard of living of reporting difficulty with ADLs (ORs=1.71). Finally, health-risk behaviour was also part of the explanation, as ex-smokers show higher odds of reporting difficulty with ADLs than those never smoke (ORs=1.45), and at the 95% level, ex-smokers are also significantly more likely to report difficulty with ADLs

than those who are current smoking. This result may indicate a more complex effect of differential level or amount of smoking among ex-smokers, which negatively impacts on their chances of reporting difficulty with ADLs.

No substantial differences were found in the individual effects on the risk of reporting difficulty with ADLs when the province characteristics were added to the model. Only the D&M has a significant effect on an individual's risk of reporting difficulty with ADLs, with persons living in provinces scoring higher in terms of developed, marketised, low health expenditure and health care institutions province being less likely to report difficulty with ADLs.

Table 7 shows the individual and province effects on one's risk of reporting difficulty with IADLs. No substantial differences are found among demographic factors (e.g. age, gender, marital status and urban/rural resident). There is a slight effect of socio-economic characteristics on the risk of reporting difficulty with IADLs, in that individuals who have no educational qualifications are less likely to report difficulty with IADLs compared to those with qualifications at the high school level and above (ORs=0.86). No substantial differences are found among individuals receiving income from different sources, while individuals without medical insurance are more likely to report difficulty with IADLs than those who have medical insurance (ORs=1.37). Ex-smokers show lower odds of reporting difficulty with IADLs compared to those who have never smoked (ORs=0.84). Finally, no substantial differences are found according to the level of living standards perceived among individuals or whether the household receives the Dibao benefit. Interestingly, no province effects are found in the risk of reporting difficulty with IADLs.

Table 8 presents the multinomial multilevel regression of reporting positive, fair or negative self-rated health. There is significant positive effect of age on reporting negative SRH (ORs=1.02), while females are more likely to report fair and negative SRH than males. In terms of marital status, widowed persons are less likely to report negative SRH than married persons, indicating the beneficial effects of cohabitation. Those living in urban areas, who have higher educational qualifications, who receive income from wages, and who do not have medical insurance are more likely to report positive SRH. Ex-smokers show 71% higher odds of reporting negative SRH than those never smoke, while individuals reporting a low standard of living and the receipt of Dibao by their household are more likely to report fair or negative SRH. Finally, no province effects are found in the risk of reporting fair and negative SRH.

Table 9 demonstrates multinomial regression models for reporting perceived wellbeing. Age shows a negative association with reporting fair or negative wellbeing, however no substantial differences are found between women and men in this respect. Widowed persons are less likely to report fair wellbeing than those who are married, while those in 'other' categories of marital status show 83% higher odds of reporting negative life satisfaction than married persons. Individuals living in rural areas are 19% more likely to report negative life satisfaction than those living in urban areas. Socio-economic status shows a significant effect on life satisfaction, as illiterate individuals or those with educational qualifications below the primary level are less likely to report fair life satisfaction than those whose qualifications are at the high school level or above; however, no significant difference is found between educational groups in terms of the risk of reporting negative life satisfaction. Individuals with no income are more likely to report fair or negative life satisfaction than those receiving income from wages (1.28 and 1.72 respectively). The perceived living standard of the

individual have a strong impact on their life satisfaction: individuals reporting a negative standard of living are 32 times more likely to report a negative life satisfaction than those perceiving a high standard of living. The odds of reporting negative life satisfaction among older people living in households receiving the Dibao are 1.54 times the odds among those who live in households not receiving this benefit. Finally, there is strong province effect with those living in provinces with good health facilities and quality of life being less likely to report fair life satisfaction (ORs=0.81); and even less likely to report negative life satisfaction (ORs=0.66).

Finally, Table 10 illustrates the multinomial regression for reporting positive, fair or negative self-reported memory. Individuals who are older, female, married, living in rural areas, with lower educational qualifications, no income sources or receiving income from 'other' sources, and who are ex-smokers, are more likely to report fair/negative memory than those who are younger, male, widowed, living in urban areas, with an education at the high school or above, receiving income from wages and never smoke. The lower perceived living standard again shows a positive association with individuals' report of fair or negative memory. Province characteristic appears to have an effect on an individual's risk of reporting fair memory, those living in provinces with good health facilities and quality of life being less likely to report fair memory (ORs=0.79).

Health inequality among provinces

Tables 6-10 show evidence of the between-province variance in terms of various health indicators. Although the models include both individual and province characteristics, there is nevertheless significant variance for all health outcomes. Figures 2 to 6 plot the province differentials on an odds scale for the five health outcomes of the models with individual

characteristics, and the value 1 represents the all-province level of reporting difficulty with ADLs or IADLs, fair/negative self-reported health, fair/negative life satisfaction, and fair/negative memory, conditional on the terms included in the fixed part of the model. It is clear that the province of Jilin shows the extreme high odds of individuals reporting difficulty with ADLs, while the Qinghai province shows the extreme low odds of such a difficulty (Figure 2). In terms of an older person's risk of reporting difficulty with IADLs, the Xinjiang province shows the highest odds, while the province of Guangxi shows the lowest odds (Figure 3). The Sichuan and Jiangxi provinces show higher odds of individuals reporting fair/negative SRH than the national average, while the provinces of Zhejiang and Shanxi show lower odds of individuals reporting fair/negative SRH than the national average (Figure 4). Figure 5 shows that the province of Guangdong shows the highest odds of individuals reporting fair/negative life satisfaction, while the Xinjiang province shows the lowest odds. Finally, the province of Chongqing shows the highest odds of individuals reporting fair/negative memory, while the Shanxi province shows the lowest odds of individuals reporting fair memory and the Guangxi province the lowest of odds of individuals reporting negative memory (Figure 6).

Discussion and conclusion

The aim of this paper was to contribute to our understanding of how the combination of individual and province characteristics can affect an individual's risk of reporting poor health status according to a range of health indicators. Overall the results show that specific demographic and socio-economic characteristics are strongly associated with the report of poor health status. More specifically, the analysis in this paper show that being female, living in rural areas, having low educational qualifications, having no income sources or receiving income from 'other' sources, being an ex-smoker, reporting relatively low living standards

and living in a household which reports the receipt of Dibao, are characteristics associated with the report of difficulty with ADLs or IADLs, fair/negative SRH, fair/negative life satisfaction and fair/negative memory. However, such individual characteristics are not the whole story, and this paper has sought to understand the effect of the province in which older persons live, on their risk of reporting poor health status. In this respect, the results show that individuals living in provinces with better health facilities and better life quality are less likely to report difficulty with ADLs or negative life satisfaction.

The results point to significant policy implications which relate both to improving the immediate environment in which the individual's lives, such as their family and household, and to the wider environment or province where their household is located. Lower socio-economic status, whether measured through individual or household indicators, is clearly and strongly associated with the report of poorer health status, as is health-risk behaviour measured in this study through smoking status, which itself has been independently associated with both lower socio-economic status and with poorer health status (Jarvis and Wardle, 1999). Public health campaigns against smoking, which are aimed at both younger and older cohorts of individuals, can contribute to the improvement of health status of current and future generations of Chinese individuals. However, statutory assistance in the form of both cash benefits and health services for individuals at the lowest part of the income distribution may also add to a comprehensive set of social policies protecting the most vulnerable groups in society. Finally, differences between provinces in a range of indicators, such as modernisation and the amount of expenditure on health services, reflect a need for greater redistribution of resources on the part of the state from those provinces with higher resources, to those with lower resources. Similarly, such an adjustment also requires ensuring that rural parts of provinces are not disadvantaged compared to urban parts. This is

particularly important as economic migration has resulted in a higher concentration of older individuals in rural parts of mainland China.

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Table 1 Variables reflecting the province characteristics

Indicator	Meaning
Urban	Percentage of urban population (based on household register) (%)
GDPpc	GDP per capita (1,000 Yuan)
Migrants	Percentage of migrants* (%)
Income	Mean income (1,000 Yuan)
VATpc	Value added tax per capita (1,000 Yuan)
GovExpen	Government expenditure per capita (1,000 Yuan)
Fixedassets	Fixed-asset investment per capita (1,000 Yuan)
Stateown	Share of state-owned enterprises in fixed-asset investment (%)
ForInvest	Share of foreign direct investment in fixed-asset investment (%)
StateCom	Percentage of state owned employees in the total of employees (%)
PrivateCom	Percentage of private owned employees in the total of employees (%)
FandHCom	Percentage of foreign and overseas Chinese employees in the total of employees (%)
SocSec	Percentage of expenditure for social safety net and employment incentives in total revenue of province (%)
MedIns	Percentage of expenditure for medical and health care in total revenue of province (%)
Hosp	Number of health care institutions per 10,000 population
Doctor	Number of medical technical personal in health care institutions per 1,000 population
Bed	Number of beds in health care institutions per 1,000 population
UrbEng	Urban Engel's** coefficient (%)
RurEng	Rural Engel's coefficient (%)

*Migrants refer to those who have lived in a place where their household registration does not belong.

** Engel's coefficient is a measure of the percentage of food expenditure in the total of personal consumption expenditure. This is between 0 and 100, and the closer to the latter, the poorer an individual is.

Table 2 Descriptive univariate information of individual variables[5]

Response	
Difficulty with ADLs	No difficulty (82.1%); Reports difficulty (17.9%)
Difficulty with IADLs	No difficulty (77.9%); Reports difficulty (22.1%)
Self-reported health	Positive (22.5%); Fair (47.1%); Negative (30.4%)
Life Satisfaction	Positive (22.9%); Fair (62%); Negative (15.2%)
Self-reported memory	Positive (19.1%); Fair (45.7%); Negative (35.2%)
Predictors	
Individual characteristics, n=10,717	
Age	Ranging between 50-96, mean=62
Gender	Male (50%); Female (50%)
Marital status	Married (86.1%); Other (separated, divorced and never married) (2.2%); Widowed (11.7%)
Residence	Urban (40.6%); Rural (59.4%)
Highest educational qualification	High school and above (12%); Elementary and middle (39.5%); Below primary (19.5%); Illiterate (29%)
Income sources	Wage (10.9%); Wage and pension (2.1%); Wage and others* (0.6%); Pension (22.6%); others* (4.6%); No income sources (59.3%)
Medical insurance	Yes (94%); No (6%)
Smoking status	Has never smoked (58%); Current smoker (31.8%); Ex-smoker (10.2%)
Family characteristics, n=10,717	
Self-rated standard of family living	Positive (3.2%); Fair (53.6%); Negative (43.2%)
Receipt of Dibao by the household	No (89.4%); Yes (10.6%)

*Others includes: unemployment compensation, pension subsidy, Workers' compensation from Industrial Accident Compensation Insurance including wage-replacement benefits, disability benefits, survivors' benefits, elderly family planning subsidies, medical aid, other government subsidies, social assistance, other income sources (including alimony or child support).

[5] The first category is the base reference in the models.

Table 3 Factor loading of province characteristics

	Factor1 (D&M)	Factor2 (HLQ)	Factor3 (SSI)	Communality
Urban	0.87	-	-	0.94
GDPpc	0.82	-	-	0.94
Migrants	0.87	-	-	0.83
Income	0.92	-	-	0.96
VATpc	0.85	-	-	0.91
GovExpen	-	-	-	0.92
Fixedassest	-	-	-	0.39
Stateown	-	-	0.85	0.75
ForInvest	0.91	-	-	0.86
StateCom	-0.75	-	-	0.79
PrivateCom	0.85	-	-	0.84
FandHCom	0.84	-	-	0.78
SocSec	-	-	0.76	0.74
MedIns	-0.64	-	-	0.83
Hosp	-0.76	-	-	0.65
Doctor	-	0.82	-	0.78
Bed	-	0.72	-	0.59
UrbEng	-	-0.83	-	0.80
RurEng	-	-0.84	-	0.71
%Var	52.60	16.10	10.10	78.80

Table 4 Factor scores for the provinces

Province	D&M	HLQ	SSI
Beijing	1.56	2.07	0.25
Tianjin	1.52	0.31	-0.05
Hebei	-1.17	0.69	-1.12
Shanxi	-0.93	1.20	0.04
Neimenggu	-0.33	1.53	0.05
Liaoning	0.01	1.09	-0.62
Jilin	-0.58	0.92	-0.39
Heilongjiang	-0.51	0.61	0.53
Shanghai	3.13	0.47	1.04
Jiangsu	1.12	-0.23	-1.10
Zhejiang	0.89	0.17	-0.99
Anhui	-0.29	-0.91	-0.63
Fujian	1.06	-1.33	-0.57
Jiangxi	-0.33	-1.13	-0.40
Shandong	-0.51	0.79	-1.63
Henan	-1.14	0.34	-1.03
Hubei	-0.18	-0.56	-0.25
Hunan	-0.62	-0.59	-0.30
Guangdong	1.20	-1.33	-0.95
Guangxi	-0.45	-1.10	-0.08
Chongqing	0.21	-0.72	0.03
Sichuan	-0.45	-0.73	0.29
Guizhou	-0.62	-1.28	0.71
Yunnan	-0.12	-1.63	0.71
Shaanxi	-0.78	0.79	0.47
Gansu	-0.90	-0.61	1.72
Qinghai	-0.09	0.13	3.28
Xinjiang	-0.69	1.04	0.96

Table 5 Summary of significant effects of predictors on the health outcomes

	Difficulty with ADLs	Difficulty with IADLs	Fair/Negative Self-reported health	Fair/Negative Life Satisfaction	Fair/Negative Self-reported memory	Difficulty with Mobility*
Individual characteristics						
Age	✓	-	✓	✓	✓	-
Gender	✓	-	✓	-	✓	-
Marital status	-	-	✓	✓	✓	-
Residence	✓	-	✓	✓	✓	(✓)
Highest educ. qualification	✓	✓	✓	✓	✓	-
Income sources	✓	-	✓	✓	✓	(✓)
Medical Insurance	-	✓	✓	-	-	-
Smoking status	✓	✓	✓	✓	✓	(✓)
Self-rated living standards	✓	-	✓	✓	✓	-
Hhold receipt of Dibao	✓	-	✓	✓	✓	-
Province characteristics (Factor Scores)						
Developed, marketised and lower health care and facilities	✓	-	-	-	✓	-
Higher Health Facilities and Quality of life	-	-	-	✓	-	-
Strong State Influence and social Security	-	-	-	-	-	-

Notes: "✓" denotes significant effects; "-" denotes non-significant effects.

* There is no substantially different effect of individual and province characteristics on the difficulty with mobility; therefore, the results are shown in the Appendix 1 & 2.

Table 6 Binomial multilevel regression estimates for reporting difficulty with ADLs

	Reporting difficulty with ADLs					
	Individual characteristics			Province characteristic		
	ORs	95% CI		ORs	95%CI	
Fixed Part						
CONS	0.03***	0.02	0.06	0.04***	0.02	0.06
Age	1.05***	1.04	1.06	1.05***	1.04	1.06
Female (ref: Male)	1.35***	1.16	1.56	1.34***	1.16	1.56
Marital status (ref: Married)						
Others	0.93	0.65	1.33	0.94	0.65	1.32
Widowed	0.97	0.83	1.14	0.98	0.83	1.15
Rural (ref: Urban)	1.44***	1.27	1.63	1.43***	1.27	1.62
Education (ref: High school and above)						
Illiterate	1.82***	1.42	2.31	1.82***	1.41	2.35
Below Primary	1.91***	1.51	2.44	1.92***	1.51	2.47
Elementary and middle	1.44***	1.15	1.80	1.44***	1.14	1.81
Income sources (ref: Wage)						
Wage and pension	1.04	0.61	1.70	1.04	0.61	1.75
Wage and other	1.87*	0.87	3.79	1.83	0.81	3.66
Pension	1.45***	1.12	1.90	1.45***	1.10	1.89
Others	2.31***	1.69	3.16	2.29***	1.68	3.22
No	1.69***	1.35	2.15	1.68***	1.31	2.15
Have not medical insurance (ref: Yes)	0.89	0.71	1.10	0.88	0.70	1.11
Smoke (ref: Never)						
Current smoking	0.90	0.78	1.04	0.90	0.78	1.05
Smoked but quit	1.45***	1.21	1.74	1.44***	1.17	1.75
Self-rated living standard (ref: Positive)						
Fair	1.07	0.77	1.53	1.07	0.75	1.52
Negative	1.71***	1.24	2.45	1.71***	1.22	2.42
Dibao household (ref: No)	1.80***	1.54	2.10	1.80***	1.56	2.09
(Factor Scores)						
Developed, marketized and lower health care and facilities				0.82*	0.65	1.01
Higher health facilities and quality of life				0.91	0.75	1.12
Strong state influence and social security				0.85	0.69	1.03
Random Part						
Level 2: Province	0.23(0.09)	0.11	0.43	0.22(0.08)	0.11	0.41

*** p<0.01, **p<0.05, * p<0.1

Table 7 Binomial multilevel regression estimates for reporting difficulty with IADLs

	Reporting difficulty with IADLs					
	Individual characteristics			Province characteristic		
	ORs	95% CI		Ors	95%CI	
Fixed Part						
CONS	0.29***	0.21	0.40	0.29***	0.20	0.41
Age	1.00	1.00	1.01	1.00	1.00	1.01
Female (ref: Male)	0.99	0.87	1.13	0.99	0.87	1.13
Marital status (ref: Married)						
Others	0.86	0.61	1.16	0.86	0.63	1.17
Widowed	0.99	0.85	1.15	0.99	0.85	1.16
Rural (ref: Urban)	1.02	0.92	1.14	1.02	0.92	1.15
Education (ref: High school and above)						
Illiterate	0.86*	0.72	1.04	0.85*	0.71	1.02
Below Primary	0.90	0.75	1.08	0.89	0.75	1.07
Elementary and middle	0.89	0.77	1.06	0.89	0.77	1.04
Income sources (ref: Wage)						
Wage and pension	1.03	0.69	1.44	1.02	0.70	1.47
Wage and other	0.92	0.46	1.72	0.89	0.44	1.69
Pension	0.93	0.77	1.12	0.93	0.76	1.12
Others	1.05	0.79	1.39	1.05	0.79	1.39
No	1.14	0.97	1.35	1.14	0.97	1.36
Have not medical insurance (ref: Yes)	1.37***	1.14	1.63	1.38***	1.15	1.65
Smoke (ref: Never)						
Current smoking	1.02	0.89	1.16	1.02	0.89	1.16
Smoked but quit	0.84*	0.69	1.01	0.84*	0.71	1.01
Self-rated living standard (ref: Positive)						
Fair	1.02	0.79	1.35	1.03	0.79	1.35
Negative	1.03	0.79	1.36	1.03	0.80	1.36
Dibao household (ref: No)	0.90	0.77	1.06	0.90	0.77	1.06
(Factor Scores)						
Developed, marketized and lower health care and facilities				1.10	0.96	1.25
Higher health facilities and quality of life				1.00	0.89	1.15
Strong state influence and social security				1.02	0.87	1.15
Random Part						
Level 2: Province	0.07(0.03)	0.03	0.15	0.07(0.04)	0.02	0.16

*** p<0.01, **p<0.05, * p<0.1

Table 8 Multinomial multilevel regression estimates for reporting fair or negative self-rated health

	Reporting fair or negative self-reported health											
	Individual characteristics						Province characteristics					
	Fair			Negative			Fair			Negative		
	ORs	95% CI		ORs	95% CI		ORs	95% CI		ORs	95% CI	
Fixed Part												
CONS	0.76	0.53	1.08	0.12***	0.08	0.19	0.77	0.54	1.10	0.12***	0.08	0.18
Age	1.00	1.00	1.01	1.02***	1.01	1.03	1.01	1.00	1.01	1.02***	1.01	1.03
Female (ref: Male)	1.17**	1.02	1.34	1.54***	1.30	1.80	1.18**	1.02	1.35	1.54***	1.33	1.80
Marital status (ref: Married)												
Others	0.89	0.62	1.31	1.19	0.82	1.75	0.89	0.61	1.33	1.18	0.80	1.75
Widowed	0.90	0.76	1.08	0.74***	0.62	0.89	0.89	0.75	1.06	0.73***	0.60	0.87
Rural (ref: Urban)	1.06	0.94	1.18	1.54***	1.36	1.75	1.05	0.94	1.17	1.53***	1.35	1.73
Education (ref: High school and above)												
Illiterate	1.05	0.86	1.27	1.65***	1.31	2.08	1.04	0.86	1.25	1.64***	1.30	2.04
Below Primary	1.36***	1.12	1.66	1.97***	1.56	2.51	1.36***	1.13	1.64	1.98***	1.57	2.50
Elementary and middle	1.23**	1.05	1.43	1.42***	1.17	1.75	1.23**	1.05	1.43	1.43***	1.17	1.74
Income sources (ref: Wage)												
Wage and pension	1.01	0.72	1.40	0.78	0.49	1.24	0.99	0.70	1.39	0.76	0.47	1.19
Wage and other	1.09	0.59	2.09	1.22	0.57	2.57	1.10	0.58	2.10	1.24	0.57	2.71
Pension	1.30***	1.07	1.58	1.94***	1.53	2.53	1.30***	1.07	1.57	1.92***	1.50	2.44
Others	1.28	0.95	1.75	2.10***	1.51	2.99	1.27	0.93	1.70	2.09***	1.49	2.94
No	1.24**	1.06	1.46	2.06***	1.67	2.55	1.24***	1.06	1.46	2.05***	1.67	2.56
Have not medical insurance (ref: Yes)	0.85	0.70	1.04	0.73***	0.58	0.92	0.85	0.69	1.04	0.73***	0.57	0.91
Smoke (ref: Never)												
Current smoking	0.97	0.84	1.10	0.91	0.77	1.07	0.96	0.83	1.11	0.91	0.78	1.07
Smoked but quit	1.00	0.82	1.22	1.71***	1.38	2.10	1.00	0.82	1.23	1.70***	1.37	2.14
Self-rated living standard (ref: Positive)												
Fair	1.66***	1.29	2.15	1.60***	1.18	2.20	1.65***	1.27	2.13	1.60***	1.18	2.21
Negative	2.32***	1.77	3.02	4.14***	3.03	5.72	2.31***	1.78	3.02	4.12***	3.05	5.80

Dibao household (ref: No)	1.19*	0.97	1.44	1.93***	1.57	2.37	1.19*	0.97	1.44	1.92***	1.55	2.35
(Factor Scores)												
Developed, marketized and lower health care and facilities							1.03	0.83	1.24	0.96	0.79	1.14
Higher health facilities and quality of life							0.91	0.79	1.06	0.95	0.83	1.10
Strong state influence and social security							1.03	0.88	1.23	1.13	0.97	1.32
Random Part												
Level 2: Province	0.19(0.06)	0.10	0.34	0.15(0.05)	0.08	0.27	0.20(0.07)	0.10	0.37	0.15(0.05)	0.07	0.28

*** p<0.01, **p<0.05, * p<0.1

Table 9 Multinomial multilevel regression estimates for reporting fair or negative well-being

	Reporting fair or negative Wellbeing											
	Individual characteristics						Province characteristics					
	Fair			Negative			Fair			Negative		
	ORs	95% CI		ORs	95% CI		ORs	95% CI		ORs	95% CI	
Fixed Part												
CONS	0.87	0.62	1.20	0.03***	0.01	0.06	0.90	0.65	1.28	0.03***	0.02	0.07
Age	0.99**	0.99	1.00	0.97***	0.96	0.98	0.99**	0.99	1.00	0.97***	0.96	0.98
Female (ref: Male)	0.98	0.85	1.12	0.95	0.78	1.16	0.98	0.86	1.13	0.96	0.79	1.16
Marital status (ref: Married)												
Others	1.15	0.78	1.68	1.83***	1.16	2.85	1.13	0.79	1.69	1.82***	1.17	2.90
Widowed	0.79***	0.67	0.92	1.03	0.83	1.28	0.79***	0.68	0.93	1.04	0.85	1.27
Rural (ref: Urban)	0.93	0.82	1.03	1.19**	1.01	1.40	0.92	0.82	1.03	1.19**	1.02	1.39
Education (ref: High school and above)												
Illiterate	0.62***	0.50	0.76	1.11	0.83	1.47	0.61***	0.50	0.73	1.06	0.80	1.41
Below Primary	0.76***	0.62	0.91	1.25	0.96	1.66	0.75***	0.62	0.90	1.21	0.91	1.62
Elementary and middle	0.94	0.79	1.12	1.10	0.86	1.43	0.94	0.79	1.11	1.09	0.84	1.39
Income sources (ref: Wage)												
Wage and pension	1.14	0.80	1.64	0.83	0.45	1.45	1.14	0.81	1.66	0.84	0.44	1.54
Wage and other	1.23	0.65	2.37	0.96	0.36	2.55	1.25	0.65	2.63	0.96	0.34	2.66
Pension	1.26**	1.04	1.53	1.15	0.85	1.56	1.27**	1.05	1.54	1.16	0.87	1.55
Others	1.26	0.95	1.66	1.36	0.92	1.99	1.27*	0.96	1.70	1.36	0.89	2.01
No	1.28***	1.09	1.51	1.72***	1.34	2.24	1.29***	1.09	1.52	1.74***	1.35	2.21
Have not medical insurance (ref: Yes)	0.87	0.71	1.07	1.16	0.89	1.52	0.86	0.70	1.06	1.17	0.88	1.52
Smoke (ref: Never)												
Current smoking	0.97	0.85	1.11	0.89	0.73	1.08	0.97	0.84	1.13	0.89	0.73	1.09
Smoked but quit	0.93	0.78	1.12	0.70**	0.54	0.93	0.93	0.77	1.12	0.72**	0.54	0.94
Self-rated living standard (ref: Positive)												
Fair	3.16***	2.50	3.97	4.25***	2.30	8.39	3.16***	2.52	4.00	4.34***	2.36	8.52
Negative	5.47***	4.28	7.04	32.33***	17.41	63.43	5.47***	4.34	7.02	33.08***	17.89	64.91

Dibao household (ref: No)	1.15	0.97	1.36	1.54***	1.23	1.90	1.16	0.98	1.38	1.55***	1.26	1.94
(Factor Scores)												
Developed, marketized and lower health care and facilities							1.06	0.88	1.24	1.14	0.92	1.46
Higher health facilities and quality of life							0.81**	0.69	0.95	0.66***	0.52	0.83
Strong state influence and social security							0.91	0.79	1.05	0.86	0.71	1.07
Random Part												
Level 2: Province	0.18(0.06)	0.09	0.32	0.45(0.16)	0.24	0.85	0.13(0.05)	0.07	0.25	0.24(0.09)	0.12	0.48

*** p<0.01, **p<0.05, * p<0.1

Table 10 Multinomial multilevel regression estimates for reporting fair or negative self-reported memory

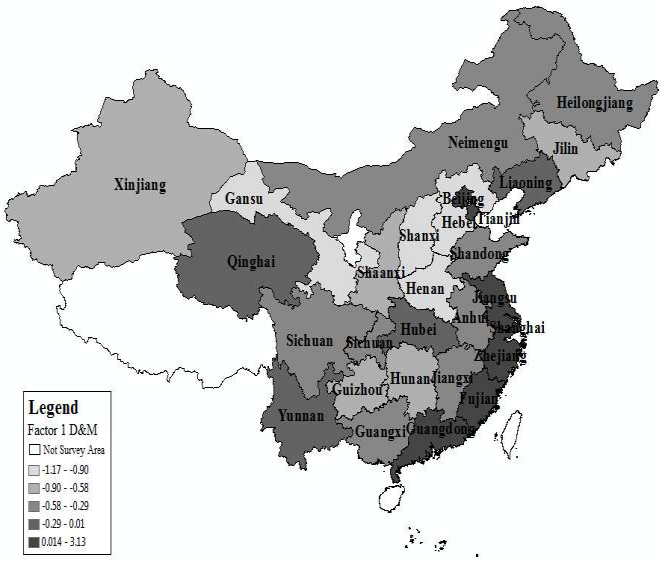
	Reporting fair or negative self-reported memory											
	Individual characteristics						Province characteristics					
	Fair			Negative			Fair			Negative		
	ORs	5% CI		ORs	5% CI		ORs	5% CI		ORs	95% CI	
Fixed Part												
CONS	0.69**	0.48	1.00	0.14***	0.09	0.21	0.74*	0.52	1.06	0.15***	0.09	0.23
Age	1.00	0.99	1.01	1.01**	1.00	1.02	1.00	0.99	1.01	1.01**	1.00	1.02
Female (ref: Male)	1.18**	1.01	1.37	1.65***	1.40	1.94	1.19**	1.02	1.37	1.67***	1.41	1.96
Marital status (ref: Married)												
Others	0.83	0.59	1.16	0.69*	0.48	1.03	0.83	0.58	1.18	0.68*	0.47	1.03
Widowed	0.85*	0.71	1.02	0.78**	0.64	0.96	0.85*	0.71	1.03	0.78**	0.65	0.95
Rural (ref: Urban)	1.17**	1.04	1.32	1.60***	1.40	1.83	1.17**	1.04	1.33	1.60***	1.40	1.81
Education (ref: High school and above)												
Illiterate	1.29**	1.04	1.59	3.46***	2.76	4.35	1.29**	1.05	1.57	3.45***	2.72	4.34
Below Primary	1.45***	1.18	1.79	3.11***	2.44	3.96	1.45***	1.20	1.75	3.10***	2.45	3.90
Elementary and middle	1.28***	1.08	1.50	1.82***	1.49	2.25	1.27***	1.10	1.49	1.81***	1.48	2.21
Income sources (ref: Wage)												
Wage and pension	0.88	0.62	1.29	0.85	0.56	1.31	0.88	0.61	1.26	0.85	0.55	1.29
Wage and other	1.46	0.76	2.84	0.74	0.30	1.76	1.42	0.75	2.85	0.72	0.28	1.72
Pension	1.15	0.94	1.41	1.26*	0.99	1.57	1.16	0.96	1.43	1.25*	1.00	1.59
Others	1.34*	0.96	1.88	1.72***	1.23	2.48	1.30*	0.96	1.77	1.66***	1.18	2.27
No	1.24**	1.03	1.47	1.64***	1.34	2.02	1.23**	1.04	1.45	1.62***	1.33	1.97
Have not medical insurance (ref: Yes)	0.88	0.71	1.10	0.89	0.71	1.13	0.89	0.70	1.12	0.89	0.70	1.16
Smoke (ref: Never)												
Current smoking	1.03	0.89	1.18	1.13	0.97	1.32	1.04	0.89	1.20	1.14	0.97	1.35
Smoked but quit	1.28**	1.03	1.55	1.47***	1.19	1.83	1.28**	1.06	1.57	1.48***	1.17	1.85
Self-rated living standard (ref: Positive)												
Fair	1.77***	1.39	2.28	1.69***	1.26	2.31	1.76***	1.37	2.33	1.68***	1.23	2.30
Negative	2.43***	1.87	3.16	3.18***	2.40	4.39	2.42***	1.86	3.16	3.17***	2.35	4.36

Dibao household (ref: No)	1.03	0.85	1.28	1.27**	1.04	1.56	1.03	0.85	1.25	1.27**	1.05	1.55
(Factor Scores)												
Developed, marketized and lower health care and facilities							0.88	0.71	1.04	0.79*	0.59	1.01
Higher health facilities and quality of life							0.89	0.74	1.04	0.95	0.74	1.19
Strong state influence and social security							0.89	0.77	1.06	0.96	0.77	1.27
Random Part												
Level 2: Province	0.22(0.07)	0.12	0.40	0.42(0.14)	0.23	0.76	0.21(0.07)	0.10	0.38	0.45(0.15)	0.23	0.81

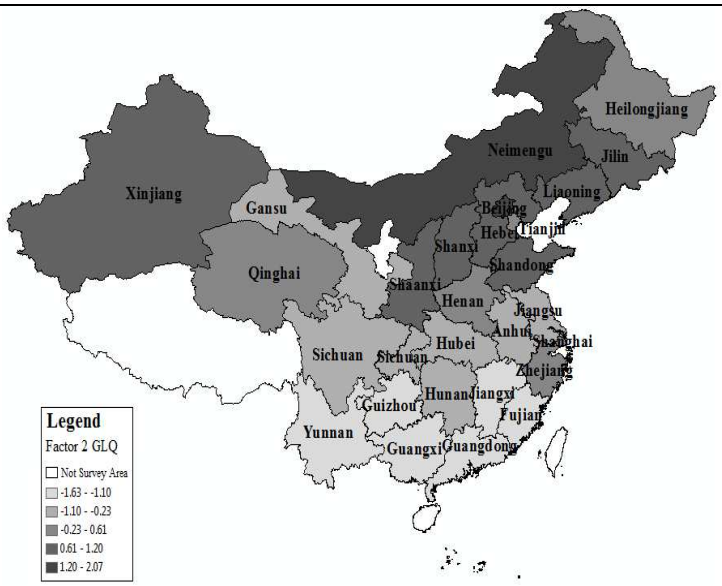
*** p<0.01, **p<0.05, * p<0.1

Figure 1 Mapping factor scores in China by province

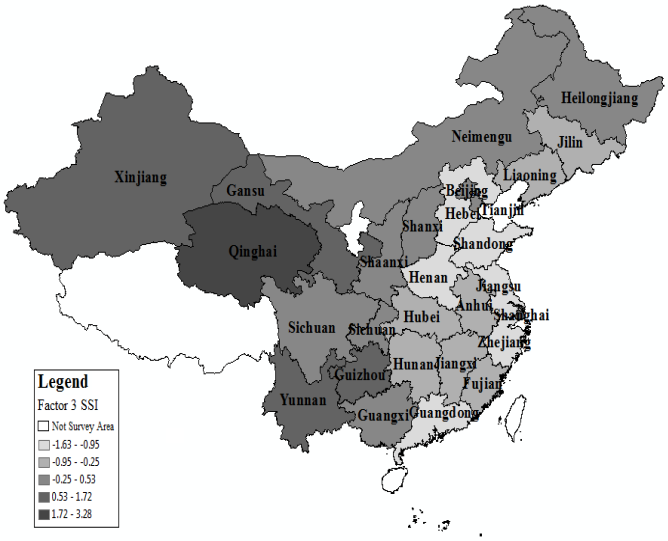
A. D&M



B. HLQ



C. SSI



D. Percentage 65+ years old people

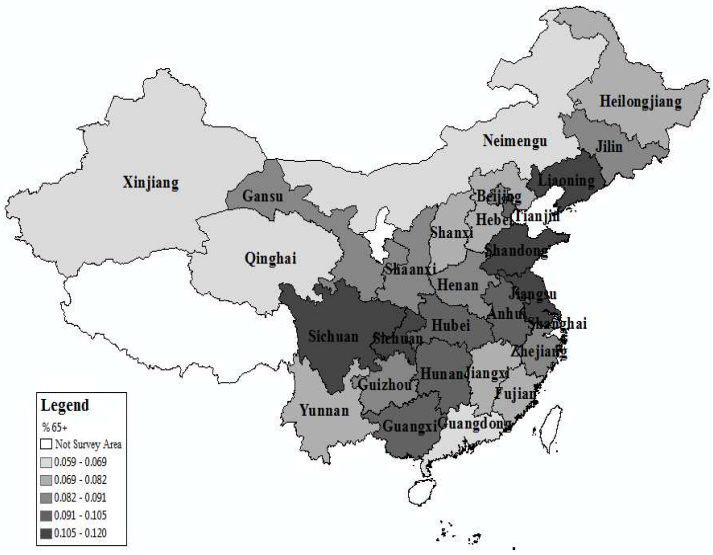


Figure 1 Differential relative odds of reporting difficulty with ADLs for provinces, derived from individual characteristics compared to the national average (1)

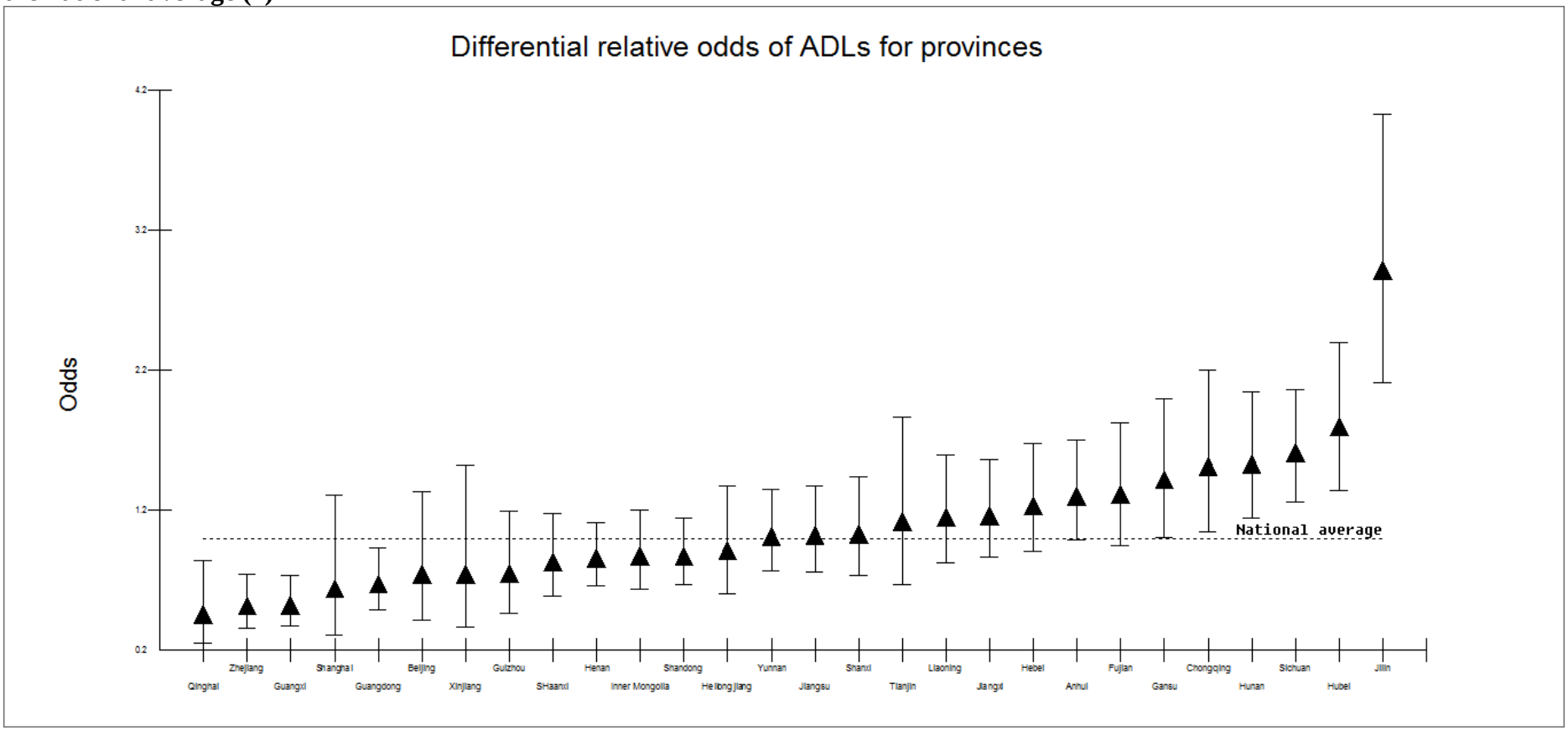


Figure 2 Differential relative odds of reporting difficulty with IADLs for provinces derived from individual characteristics compared to the national average (1)

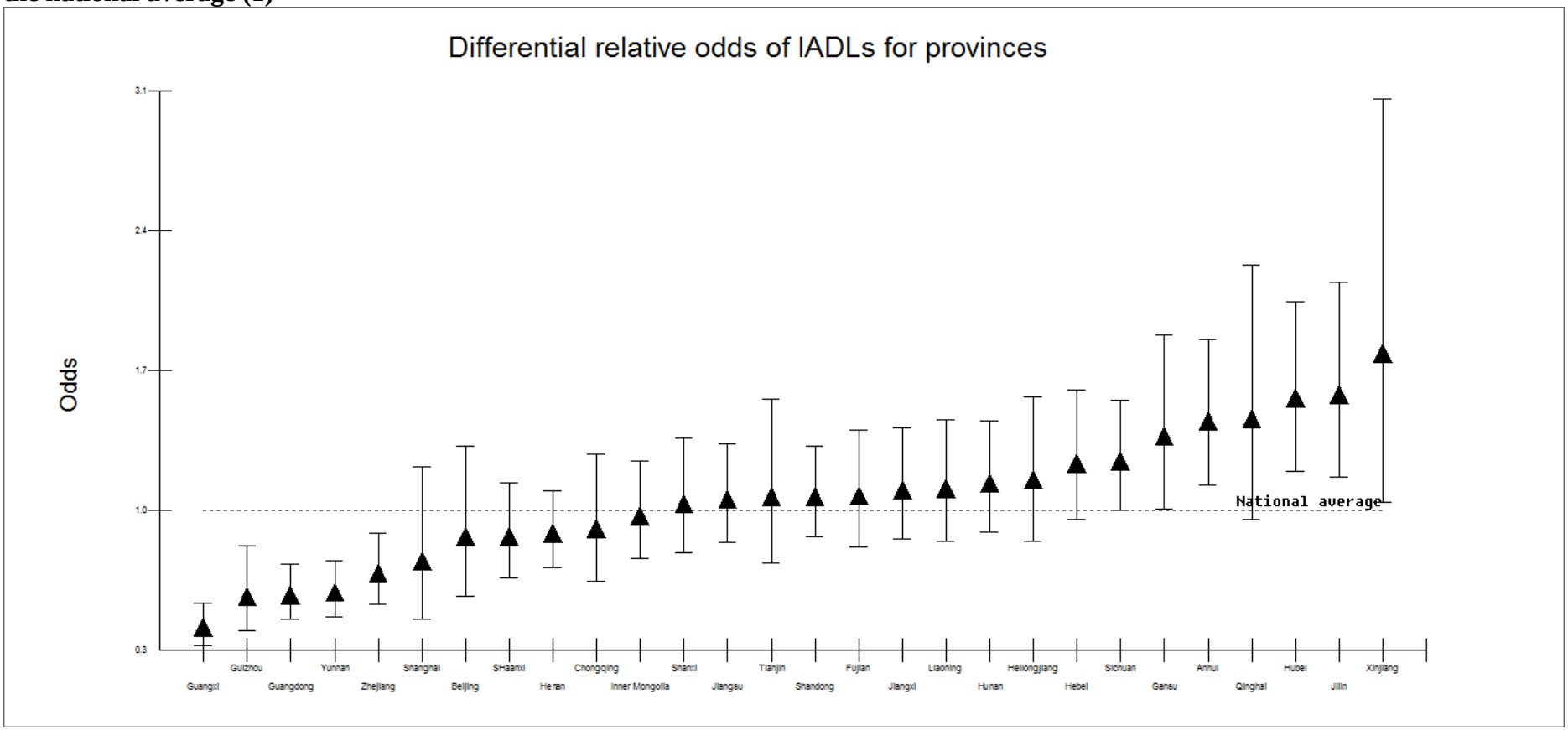


Figure 3 Differential relative odds of reporting fair SRH (A) and negative SRH (B) for provinces derived from individual characteristics compared to the national average (1)

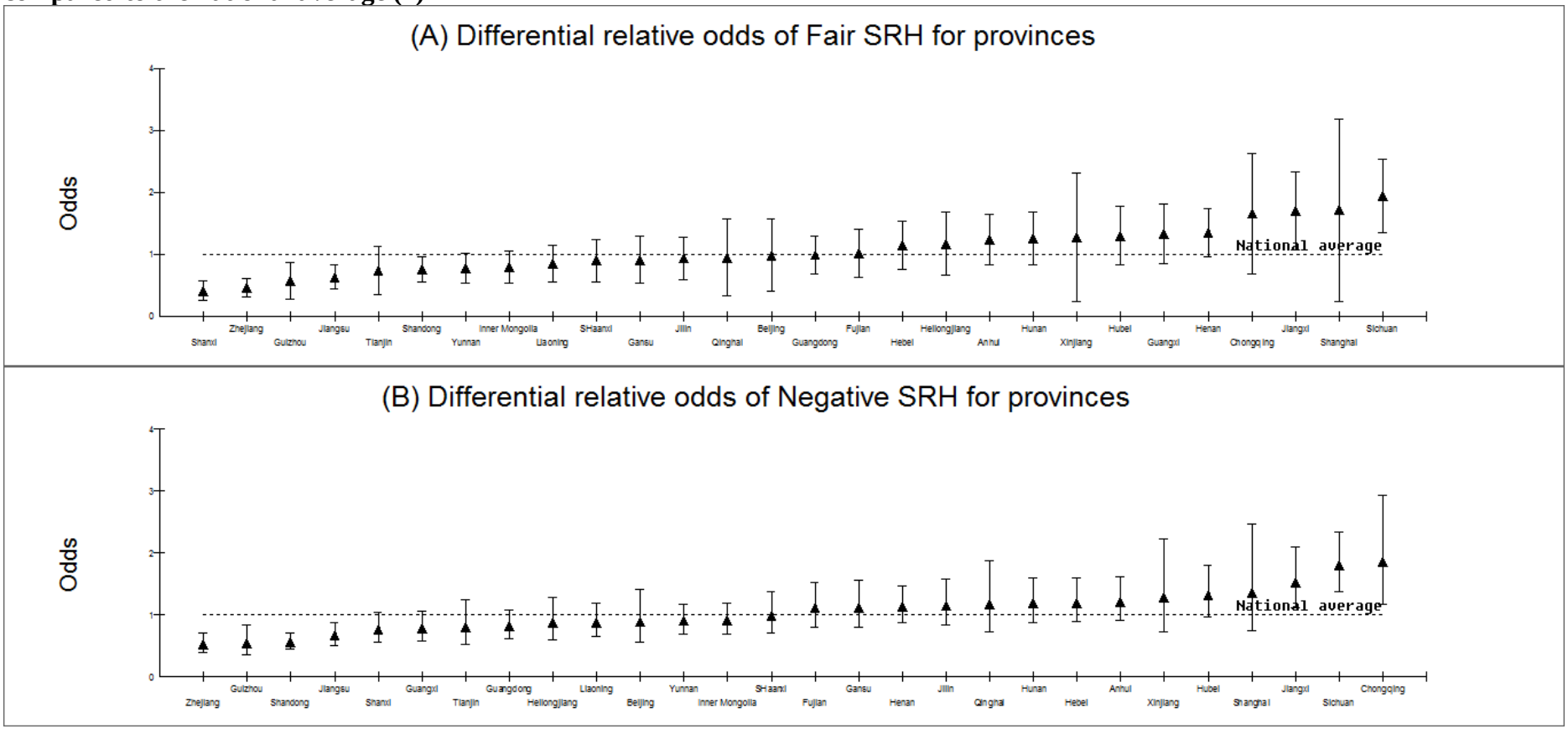


Figure 4 Differential relative odds of reporting fair life satisfaction (A) and negative life satisfaction (B) for provinces derived from individual characteristics compared to the national average (1)

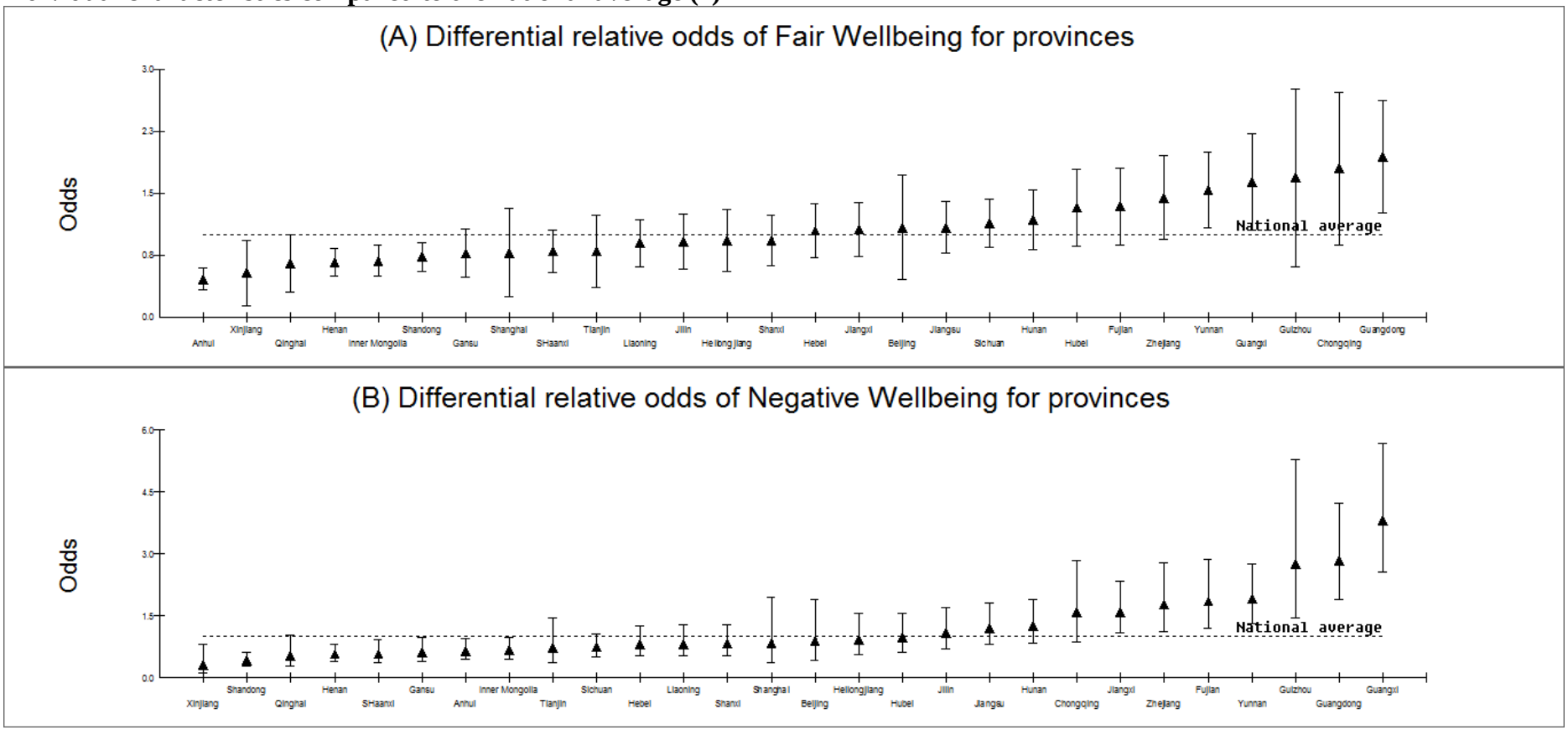
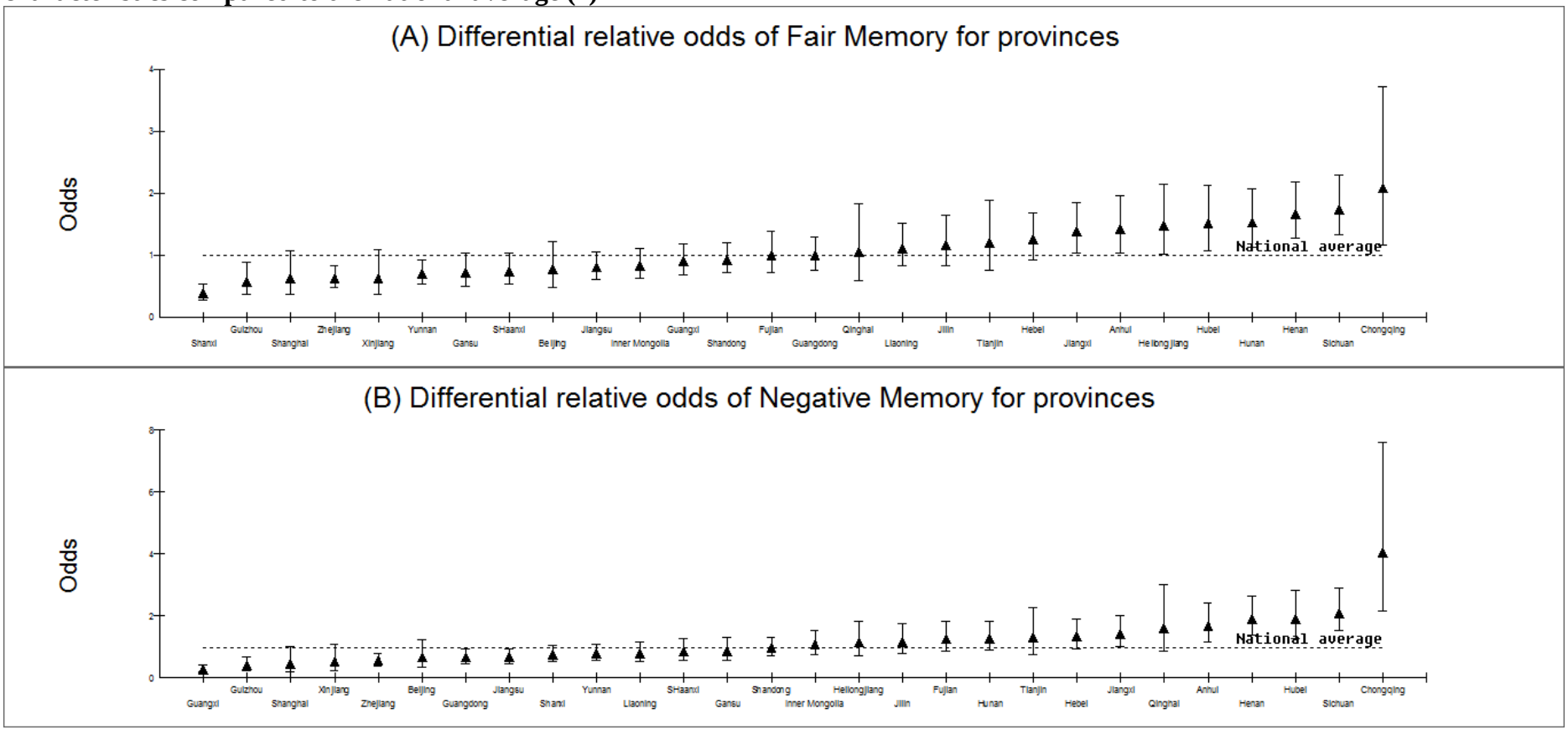


Figure 5 Differential relative odds of reporting fair memory (A) and negative Memory (B) for provinces derived from individual characteristics compared to the national average (1)



Appendix 1: Binomial multilevel regression estimates for reporting no difficulty at all **vs** any difficulty with mobility tasks

	Reporting difficulty with Mobility					
	Individual characteristics			Province characteristic		
	ORs	95% CI		ORs	95%CI	
Fixed Part						
CONS	1.47	1.12	1.97	1.42	1.03	1.93
Age	1.00	1.00	1.01	1.00	1.00	1.01
Female (ref: Male)	0.94	0.84	1.05	0.94	0.84	1.05
Marital status (ref: Married)						
Others	0.95	0.73	1.26	0.96	0.73	1.28
Widowed	0.91	0.79	1.03	0.91	0.80	1.04
Rural (ref: Urban)	1.04	0.95	1.13	1.04	0.95	1.14
Education (ref: High school and above)						
Illiterate	0.94	0.80	1.09	0.95	0.81	1.10
Below Primary	1.00	0.86	1.16	1.01	0.87	1.18
Elementary and middle	0.95	0.84	1.09	0.96	0.84	1.09
Income sources (ref: Wage)						
Wage and pension	0.99	0.74	1.31	1.00	0.75	1.34
Wage and other	1.06	0.62	1.85	1.08	0.62	1.90
Pension	0.89	0.77	1.04	0.90	0.76	1.05
Others	0.88	0.70	1.09	0.88	0.70	1.11
No	1.02	0.91	1.16	1.03	0.89	1.18
Have not medical insurance (ref: Yes)	1.09	0.92	1.30	1.09	0.92	1.28
Smoking status (ref: Has never smoked)						
Current smoker	0.90*	0.81	1.01	0.90*	0.80	1.01
Ex-smoker	0.82**	0.70	0.95	0.82**	0.71	0.96
Self-rated living standard (ref: Positive)						
Fair	1.05	0.79	1.29	1.08	0.85	1.33
Negative	1.04	0.79	1.28	1.07	0.86	1.33
Household receipt of Dibao (ref: No)	0.93	0.82	1.06	0.93	0.81	1.06
(Factor Scores)						
Developed, marketized and lower health care and facilities				1.01	0.87	1.18
Higher health facilities and quality of life				0.94	0.82	1.09
Strong state influence and social security				0.95	0.79	1.16
Random Part						
Level 2: Province	0.12(0.05)	0.06	0.24	0.15(0.06)	0.07	0.31

*** p<0.01, **p<0.05, * p<0.1

Appendix 2: Binomial multilevel regression estimates for reporting no difficulty/ having difficulty but can still do it **vs** having difficulty and needing help/ Cannot do it even with help in mobility tasks

	Reporting difficulty with Mobility					
	Individual characteristics			Province characteristic		
	ORs	95% CI		ORs	95%CI	
Fixed Part						
CONS	0.07	0.04	0.12	0.07	0.04	0.12
Age	1.00	0.99	1.01	1.00	0.99	1.01
Female (ref: Male)	0.94	0.77	1.14	0.95	0.78	1.16
Marital status (ref: Married)						
Others	0.94	0.57	1.48	0.93	0.56	1.49
Widowed	1.03	0.82	1.29	1.03	0.81	1.29
Rural (ref: Urban)	1.21**	1.03	1.43	1.22**	1.03	1.43
Education (ref: High school and above)						
Illiterate	0.99	0.75	1.30	0.96	0.73	1.28
Below Primary	1.09	0.83	1.44	1.06	0.81	1.41
Elementary and middle	1.02	0.81	1.31	1.01	0.80	1.31
Income sources (ref: Wage)						
Wage and pension	1.05	0.64	1.68	1.05	0.64	1.69
Wage and other	0.80	0.28	1.94	0.80	0.29	1.93
Pension	0.86	0.66	1.13	0.87	0.67	1.15
Others	0.70*	0.45	1.06	0.70*	0.46	1.06
No	0.80**	0.63	1.01	0.81**	0.64	1.03
Have not medical insurance (ref: Yes)	0.96	0.72	1.27	0.96	0.70	1.30
Smoking status (ref: Has never smoked)						
Current smoker	0.96	0.79	1.17	0.97	0.79	1.19
Ex-smoker	0.92	0.70	1.19	0.95	0.72	1.23
Self-rated living standard (ref: Positive)						
Fair	1.38	0.89	2.16	1.36	0.89	2.21
Negative	1.34	0.87	2.14	1.33	0.86	2.17
Household receipt of Dibao (ref: No)	1.08	0.86	1.36	1.09	0.84	1.37
(Factor Scores)						
Developed, marketized and poor health care and facilities				1.04	0.93	1.17
Good health facilities and life quality				0.93	0.84	1.03
Strong state influence and social security				1.00	0.89	1.11
Random Part						
Level: Province	0.01(0.01)	0.00	0.04	0.01(0.01)	0.00	0.06