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# Perceived Social Policy Fairness and Subjective Wellbeing: Evidence from China

Feng Sun · Jing Jian Xiao

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Abstract This study examined the relationship between perceived fairness of social policies and subjective well-being. Two types of policies examined were related to income distribution and social security. Subjective well-being was measured by work and life satisfaction. In addition, subjective well-beings between different income, age, and education groups in the context of perceived social justice were compared. With data from a random telephone survey conducted in Beijing, China among 2,113 respondents, findings from structural equation modeling indicate perceived fairness of social security and income distribution policies are positively associated with subjective well-being. After controlling for income, age, and education, the effect of income distribution fairness on work satisfaction was still positive and significant but had decreased in intensity, while the effect size on life satisfaction had changed little. Effects of social security fairness on both life and work satisfaction were still significant but had changed in different directions after adding demographic variables, in which the effect on life satisfaction had increased, while the effect on work satisfaction had decreased in size.

**Keywords** Subjective well-being · Work satisfaction · Life satisfaction · Social policy fairness · Social justice

## **1** Introduction

Public perceptions of social policies contribute to subjective well-being (Wong et al. 2006). Progressive policy makers also need to hear people's perceptions and evaluations of existent and new social policies in addition to information from objective measures

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(Veenhoven 2002). People's perceptions of social policies are especially important in a transitional economy with unprecedented high economic growth and substantial social changes such as China. Since late 1970s, China started economic reform and open-door policies with one of the goals to improve people's life quality. However, the economic growth is not positively associated with life satisfaction. From 1994 to 2005, China experienced remarkably fast economic growth, with real income per capita increasing by a factor of 2.5. Yet during the same time period, the percentage of people who say they are dissatisfied has increased, and the percentage of the satisfied has decreased (Kahneman and Krueger 2006), which provides another significant example for the Easterlin paradox (Easterlin 1974). The above facts suggest that economic growth is not associated, or even negatively associated with people's happiness, which should not be the goal of human development and social progress.

If economic growth brings unhappiness, we need to find reasons and sources. Reform toward market economy is the major motivation of Chinese economic growth. Do all market economies reduce happiness when they increase material production? We assume that people would not be happy in the following situations: (a) when people need to purchase social security and basic rights; such as, education, healthcare, and housing, that could be provided by the government; (b) when the law cannot protect the dignity of workers who work in worsening environments, whose wages are cut arbitrarily, and whose working hours are lengthened without compensation; and (c) when people cannot share outcomes of the market economy fairly and people in the bottom class perceive a sense of deprivation and hatred of the rich. Thus, if the market economy is not built up on the foundation of comprehensive social security system and fair distribution mechanism, happiness could not increase with the economic growth (Sun 2002, 2010).

Based on the above assumptions, this study focused on the effects of perceived fairness of social policies and subjective well-being in the context of economic reform in China. The remainder of the paper is as follows. Section 2 reviews the literature and presents the uniqueness of this study. Section 3 describes the data and research method. Section 4 uses structural equation modeling to the analyze effects of social policy fairness on subjective well-being. Section 5 expands the previous analyses by adding demographic factors. Section 6 concludes and discusses policy implications.

#### 2 Literature Review and Hypotheses

Happiness is a common pursuit of human beings. In traditional Chinese culture, "harmony society," "peaceful world," and "comfortable home" are all expectations of a happy life. Happiness is the intersection between social ideology and individual value. Happy life should be covered by three aspects of life: (a) material life through food, clothing, housing, and transportation, reflecting the relationship between human beings and nature; (b) identity between individuals and their social groups, reflecting a sense of belonging people seek from social relationships; and (c) individual's internal spiritual status, reflecting individuals' understanding and comprehension of life meanings (Lu 2005).

Happy life can be measured objectively and subjectively, in which the subjective measure is called subjective well-being (Diener 1984; Diener et al. 1999). Subjective well-being can be understood from three aspects: (a) sense of happiness in emotion, (b) satisfaction in cognition, and (c) evaluation in experience (Xing 2005). Subjective well-being can be measured by an overall variable or latent variables. One indicator can be used to measure overall happiness, such as "Overall, are you happy now?" This measures

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happiness in emotion, usually unstable and reflecting an instant mood. Latent variables refer to an approach in that happiness is refined in several aspects and each aspect is measured by several indicators. This measurement can collect information from cognition and experience, and the information collected is relevant to relatively more stable and enduring attitudes and well-being.

Research on factors associated with subjective well-being focuses on income, age, occupation, education, and marital status. The relationship between income and happiness attracts many researchers. For example, a study examined the relationship between national wealth and subjective well-being based on data from the World Value Study (Inglehart et al. 2004). In 2004, two underdeveloped countries, Puerto Rico and Mexico, ranked the top among 82 countries. A northern European country, Denmark, ranked third. The U.S. ranked 15th. Japan, China, and South Korea ranked 42, 48, and 49, respectively. Zimbabwe ranked last. This ranking suggests that economy may not be the major factor to determine happiness. People's personality (Latin American countries), social benefits (Denmark), political stability (Zimbabwe), and work competition (East Asian countries) may decide happiness too.

Research shows the relationship between income and happiness is complicated. Diener and Biswas-Diener (2002) reviewed studies on the relationship between income and subjective well-being and concluded that there are at most small correlations between income and subjective well-being within nations, but these correlations appear to be larger in poorer countries. Easterlin (2001) found the correlation between income and happiness among Americans was only 0.20. Rose (2003) researched Russia as a transitional economy and found that the influence of income was not large but public benefit policy had a more important influence. Hagerty and Veenhoven (2003) found that income and happiness had stronger correlations in poorer countries.

Early research assumed that happiness would decrease with age but was not supported by empirical research. Blanchflower and Oswald (2008) reported that there was a U-shape between age and happiness, and 40-year-olds had the lowest level of happiness. Age is not only a demographic variable but has information related to the specific eras in which people grew. Thus using longitudinal data is better than cross-section data to understand the influence of age (Xing 2005).

Happiness may be associated with marriage, education, gender, occupation, and race. Oswald (1997) used data from developed countries and found that people with following characteristics had a higher level of happiness: married, high income, White, well-educated, and self-employed. Oswald believed that these conclusions could be generalized to different periods, countries, and measures of happiness.

Research on the relationship between social policy evaluation and subjective well-being is limited in the literature. Alesina et al. (2004) used data from the U.S. and Europe to examine the relationship between inequality and happiness and found that individuals have a tendency to report themselves less happy when inequality is high. With data from Hong Kong, Wong et al. (2006) examined perceptions and evaluations of social programs on subjective well-being and found positive associations. In a position paper, Veenhoven (2002) strongly argued to include subjective indicators in social policy indicators to provide more comprehensive and accurate information for policy makers.

In recent years, research on happiness has increased in China. Zeng and Yuan (2005) and Luo (2006) used an overall indicator to measure happiness with the wording "Overall, are you happy now?" and found rural residents were happier than urban residents. Xing (2006) used latent variables to measure happiness and investigated ten aspects of life, including contentment with sufficiency, self-acceptance, mental health, physical health,

mental balance, social confidence, growth and progress, goals and values, human relationships, and family atmosphere. His conclusion was that urban residents were happier than rural residents. In factors associated with happiness, researchers examined income, age, and education. Luo (2006) used logit regressions to analyze the 2002 survey of urban and rural households and found that per capita income had positive associations with happiness in both urban and rural households, but the effect in urban households was greater than that in rural households. Xing (2006) used means and variance analyses to examine data from the 2005 Survey of Shandong Urban and Rural Areas and found income had a significant effect on happiness and the effect was greater in the urban area than that in the rural area.

# 2.1 Uniqueness of This Study

Compared to previous research, this study has following unique features. First, this study investigated the association between subjective well-being and perceived fairness of social polices closely related to people's life; such as, income distribution and social security, which are major policy concerns in a transitional economy with rapid economic growth and dramatic social changes.

Second, this study employed subjective measures to directly measure evaluation of public policies regarding income distribution and social security, while much previous research used objective measures of these policies. For example, traditional economic research on income distribution usually uses Gini coefficients to measure income distribution disparities but does not include subjective evaluation on fairness of income distribution. An alternative approach is to let ordinary people from all socioeconomic groups conduct the evaluation. Both objective and subjective indicators are helpful for policy makers (Veenhoven 2002). We need to collect information from them for subjective evaluation of daily life and perceived comparison with other demographic groups. For income disparities, evaluations from people of different social classes are different (some may believe the disparity is normal, some may believe it is not large enough, and others may perceive it as intolerable). Then, these evaluations may result in different levels of happiness. Thus, introducing subjective evaluation of income distribution could more accurately reflect the status of social justice. In the same reasoning, traditional research on social security emphasizes the coverage of social security benefits and growth rate of social security funding but ignores satisfaction with social security of people in various social classes. Compared to previous research of social policies, this study investigated people's perceived fairness with several aspects of social justice such as income distribution, housing, healthcare, employment, and education and their associations with subjective well-being. In addition, we also conducted additional in-depth analyses by considering demographic characteristics such as income, education, and age when the relationship between perceived fairness of social policies and subjective well-being was examined.

Third, this study used a comprehensive measure of subjective well-being that relates to several aspects of life, satisfaction with income, work, human relationships, housing, and family life. We believe using comprehensive measures can collect information on stable and enduring attitudes and well-being, ensuring the validity and reliability of data, which is realistic in analyses and doable in methodology to study subjective well-being in social transition.

Finally, this study used structural equation modeling (SEM) to quantify complex relationships between demographic factors, social policy fairness and subjective wellbeing, which is more sophisticated than previous research of subjective well-being in the

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context of China. In this study, we used SEM to investigate associations between latent variables and their indicators, and between several latent variables to examine determinants of subjective well-being.

#### 2.2 Hypotheses

Based on the literature review, we developed the following hypotheses: (a) The fairer people perceive social policies, the greater their subjective well-being; (b) Subjective well-being of the high income group is greater than that of the low income group; (c) Subjective well-being is distributed in a U-shape along with age; i.e., subjective well-being of the young or the old is greater than that of the middle-aged; and (d) More educated people have greater subjective well-being.

# 3 Method

#### 3.1 Data

The data used in this study were collected from the "Survey of 2005 Beijing Residents' Opinions about Constructing a Harmonious Society" by the Beijing Statistics Bureau. The survey used Beijing residents' telephone numbers as the sampling frame and selected the samples by random dialing. Telephone interviews generated 2,113 useful surveys. The survey questions included three parts. The first part included demographic characteristics such as gender, education, occupation, and income. The second part was about subjective well-being, including five indicators regarding various aspects of life. The third part was about social policy evaluations, which also had five operational indicators.

Before data analyses, income and age were recoded. Monthly income was recoded to three groups: (a) under 1,000 yuan, (b) 1,000–4,000 yuan, and (c) over 4,000 yuan. Age was recoded to three groups: (a) under 35, (b) 35–55, and (c) over 55. We believe the relationship between income and subjective well-being is not a simple linear one. It is not very meaningful to study how many units of happiness would increase if income increased one unit; the same reason for age. On the other hand, comparing different income and age groups about their subjective well-being and their determinants are more meaningful for policy making and implementation. We used maximization likelihood estimation to impute missing data (Sun 2005). The sample distribution is presented in Table 1.

#### 3.2 Measurements of Latent Variables

#### 3.2.1 Subjective Well-being

We used five ordinal indicators to measure subjective well-being, which are satisfaction with personal income, job, housing, human relationships, and family life. For each indicator, 1 means *satisfied very much* and 6 means *dissatisfied very much*. Descriptive statistics of these indicators are presented in Table 2.

For data reduction, we used principal component analyses with varimax rotation. Results suggested that five indicators of subjective well-being fell into two categories. One category included satisfaction with income and job, which are relevant to work and was labeled *work satisfaction*. The other category included satisfaction with housing,

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	Frequency	%
Male	988	46.8
Female	1,125	53.2
Under 35	886	41.9
35-55	850	40.2
56 or older	377	17.8
Under 1,000 yuan per month	827	39.1
1,000-4,000 yuan per month	1,065	50.4
More than 4,000 yuan per month	221	10.5
Middle school or lower	860	40.7
High school/Trade school	684	32.4
College or higher	569	26.9
Total	2,113	100.0

#### Table 1 Sample distribution

Table 2 Descriptive statistics of subjective well-being

	N	Min	Max	Mean	SE
Q10 Satisfaction with personal income	2,113	1	6	3.19	1.157
Q11 Satisfaction with current job	2,113	1	6	3.68	1.699
Q12 Satisfaction with current housing	2,113	1	6	2.73	1.051
Q13 Satisfaction with human relationships	2,113	1	6	2.40	.938
Q14 Satisfaction with family life	2,113	1	6	2.18	.827

interpersonal relationships, and family life, which are relevant to life and was labeled *life* satisfaction (Table 3).

#### 3.2.2 Social Policy Evaluation

There were five ordinal indicators for social policy evaluation, which were whether or not current policies on income distribution, housing, employment, healthcare, and education were fair. For each indicator, 1 = fair, 2 = a little fair, 3 = hard to say, 4 = unfair, and 5 = very unfair. Descriptive statistics are presented in Table 4. After conducting principal component analyses, five indicators fell into two categories (Table 5). The first category included satisfaction with income distribution, housing, and employment policies, which are relevant to and labeled as income distribution. The second group included satisfaction

<b>Table 3</b> Principal component analyses of subjective well-being		Factor 1	Factor 2
	Q10 Satisfaction with personal income	.164	.802
	Q11 Satisfaction with current job	.049	.824
	Q12 Satisfaction with current housing	.657	.170
Values in bold indicate items in this column are selected for this factor	Q13 Satisfaction with human relationships	.742	041
	Q14 Satisfaction with family life	.751	.170

Table 4         Opinions about social           justice	a social	N	Min	Max	Mean	SE	
	Do you believe following	Do you believe following current policies are fair					
	Q71 Income distribution	n 2,113	1	5	2.82	.951	
	Q72 Housing	2,113	1	5	2.80	1.073	
	Q73 Employment	2,113	1	5	2.61	1.069	
	Q74 Healthcare	2,113	1	5	2.69	1.032	
	Q75 Education	2,113	1	5	2.34	1.068	

Table 5         Principal component           analyses of social justice		Factor 1	Factor 2
indicators	Q71 income distribution	0.759	0.166
	Q72 Housing	0.510	0.445
	Q73 Employment	0.799	0.067
Values in bold indicate items in this column are selected for this factor	Q74 Healthcare	0.159	0.748
	Q75 Education	0.097	0.779
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with healthcare and education policies, which are relevant to and labeled as *social security* in further analyses.

After four latent variables were identified, we created a conceptual framework to describe the relationship between income distribution fairness, social security fairness, work satisfaction, and life satisfaction. We believe both fairness variables, income distribution and social security, contribute to work and life satisfaction (Fig. 1).

#### 4 Effects of Policy Satisfactions on Subjective Well-being

## 4.1 Structural Equation Modeling

Structural equation modeling is a statistical method to explore concepts' relationships and structures. It integrates ideas of factor analysis, path analysis, and multiple regression. In this study, we created structural models that included: (a) measurement model reflecting



Fig. 1 Relationship between satisfaction with income distribution and social security policies and work and life satisfaction

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associations between indicators and latent variables; (b) structural models reflecting the structures between latent variables; (c) estimation of indicator variable's error terms reflecting the degree of residual errors; (d) covariance estimation between error terms reflecting correlations between indicator variables; and (e) variances of the exogenous latent variables. We also conducted tests on the model's goodness of fit by using likelihood ratio chi-square test, GFI, and RMR. The criteria used are: the closer these values of the model are to the saturated model, the better the model fits.

#### 4.2 Structural Model of Subjective Well-being

All people in any society should have intuition on income disparity. Even though intuition is not as accurate as Gini coefficients estimated by economists, it does exist. At the same time, people have a basic expectation about their living environment's uncertainty and risk. This expectation may not be a rational expectation stated by economists, but it is closely related to social security. Thus, income distribution and social security should affect people's life and work satisfaction. We are concerned about the intensity of this influence and which factor, income distribution or social security, has the larger impact. Further,



we also need to understand how perceived fairness of income distribution and social security polices affects work and life satisfactions. The following is the model:

(1) Structural models:

Job happiness = a \* distribution + c \* security

Life happiness = b \* distribution + d \* security

(2) Measurement models:

 $Q10 = \beta 1 * job + e1$   $Q11 = \beta 2 * job + e2$   $Q12 = \beta 3 * life + e3$   $Q13 = \beta 4 * life + e4$   $Q14 = \beta 5 * life + e5$   $Q71 = \beta 6 * distribution + e6$   $Q72 = \beta 7 * distribution + e7$   $Q73 = \beta 8 * distribution + e8$   $Q74 = \beta 9 * security + e9$   $Q75 = \beta 10 * security + e10$ 

Based on the above equations, we drew the structural model and conducted analyses with AMOS5.0. The results are presented in Fig. 2 and Tables 6 and 7.

4.3 Results

#### 4.3.1 Income Distribution

From the perspective of economics, it does not matter if the disparity is large but reasonable. If income disparity could facilitate productivity, increase per capita income and create an incentive mechanism, it is considered reasonable. Thus, economists believe reasonable disparities in income should bring positive consequences since income gaps have the demonstration effect of consumption that stimulates the increase of consumption (Chen 1991). However, from the perspective of subjective well-being, this argument seems too simplified. Sometimes even when income disparity changes are reasonable from an economic sense, many people still feel unhappy. Or sometimes income disparities are unreasonable, its influence on subjective well-being is minimal. For example, in 2004 the Mexico's Gini coefficient was .48 while its subjective well-being ranked second in the world.

What are the effects of perceived fairness of income distribution policy on subjective well-being among the Chinese? Results show that, first, perceived fairness of income distribution policies has positive effects on both work and life satisfaction (0.551 and 0.446, respectively), which suggest that people who rate lower in income distribution policies are also more dissatisfied with life and work.

Second, the estimated coefficient of income distribution on work satisfaction is greater than that on life satisfaction, suggesting dissatisfaction with distribution policies brings more unhappiness in work than in life. The finding is relevant to the current distribution

	Model 1 (no demographics)		Model 2 (with demograph		
	Estimate	Z	Estimate	Z	
Structural model					
Life ← distribution	.466	11.077	.453	10.724	
Work ← distribution	.551	8.821	.116	5.182	
Work ← security	.697	5.157	.246	3.578	
Life ← security	1.256	7.768	1.841	5.836	
Measurement model					
Job ← work	1.000		1.000		
Income ← work	1.103	8.885	4.103	9.241	
Housing ← life	1.000		1.000		
Human relationships ← life	.907	12.953	.905	13.177	
Family ← life	1.069	13.296	.995	13.065	
Distribution	1.000		1.000		
Housing ← distribution	.993	13.553	1.041	13.534	
Employment ← distribution	1.079	13.844	1.045	13.552	
Education ← security	1.000		1.000		
Healthcare ← security	1.081	6.692	1.112	5.592	
Work ← young			.001	.091	
Work ← old			.387	8.383	
Work ← <1,000 yuan			.268	8.179	
Work ← >4,000 yuan			122	-4.439	
Work ← middle school or lower			.101	5.047	
Work ← college or higher			001	098	
Life ← young			148	-5.282	
Life ← old			122	-3.417	
Life ← <1,000 yuan			.056	2.005	
Life ← >4,000 yuan			108	-2.417	
Life ← middle school or lower			.055	1.778	
Life ← college or higher			030	-1.080	

### Table 6 Results of structural models

Table 7Test resultsof structural model		Model 1		Model 2	
		RMR	GFI	RMR	GFI
	Default model	.102	.940	.086	.830
	Saturated model	.000	1.000	.000	1.000
	Independence model	.218	.719	.150	.671

policy in China, which emphasizes efficiency in primary distribution and fairness in secondary distribution. Under the guidance of this policy, if enterprises focus only on efficiency, situations, such as disrespecting worker dignity, worsening work environment,

deducting wages, and lengthening work hours, would happen. When enterprises are not managed well, ignoring fairness and basic rights of workers when they are laid off or demoted, the situation inevitably increases dissatisfaction with work and also has greater social impacts that endanger stability of the whole society.

Third, for three indicators of income distribution, the effect of employment is the largest (1.079), income is smaller (1.000), and housing is the smallest (.993). In present-day China, income and housing distributions are closely tied to employment. For most workers, without a working unit, there is no way to receive housing. Inequality in employment affects people's living conditions and qualities and, eventually, affects their subjective well-being.

### 4.3.2 Social Security

Social security has important functions such as preventing poverty, reducing people's risk expectations, and ensuring social stability. In present-day China, the old social security system built up in the planned economy has disappeared. The new system is building but far from complete. The coverage of social security is small and most collective- and private-owned enterprises are not in the social security system. This situation makes people vulnerable in turbulent market economy and affects people's subjective well-being.

Our results show that, first, effects of perceived fairness of social security policies on both work and life satisfaction are significant, suggesting that as people are dissatisfied with social security polices, their subjective well-being decreases. In addition, effects of social security on work and life satisfaction (1.256 and 0.697, respectively) are greater than those of income distribution (0.551 and 0.446, respectively). The possible reason is that income distribution reflects reconstruction of the distribution mechanism in the society, from which some groups benefit and some suffer. It is normal that subjective well-being of beneficiaries increases. However, social security is about the minimum living standard. If the coverage of social security is too narrow or the benefit level is too low to maintain a minimum living standard, it decreases people's subjective well-being.

Secondly, the effect of social security on life satisfaction is greater than that of work satisfaction (1.256 vs. 0.697). This may be explained from the two indicators of this latent variable, which are healthcare and education. Research on saving motives conducted by China People's Bank in 2005 revealed that saving for medical care and children's education always top the list of saving motives. Thus, depressing consumption to increase savings is the basic budgeting strategy used by ordinary Chinese, which lowers quality of life and also decreases subjective well-being. Among the two indicators, the effect of healthcare is greater than education (1.081 vs. 1.000), which is consistent with the rank of saving motives in previous research.

## 5 Further Analyses by Adding Demographics

We conducted additional analyses by including demographic characteristics in the model. We assume that facing similar income distribution and social security situations in a society, people in different social classes may perceive them differently and, thus, have different levels of subjective well-being. Specifically, we examined associations between policy evaluation and subjective well-being by adding income, age, and education variables in the analyses.

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#### 5.1 Revised Structural Model

Figure 3 presents a revised structural model after adding income, age and education variables. In the figure, young refers to those age under 35 and old refers to those over 55, while age group 35–55 is the reference category. Low income group refers to monthly income lower than 1,000 yuan and high income refers to monthly income over 4,000 yuan with the income of 1,000–4,000 yuan group as the reference category. For education variables, "Mid" represents middle school or lower and "Uni" represents university or higher with high school as reference category. The models are below:

(1) Structural models:

Job happiness = a \* distribution + c \* security + e \* age + g \* income + i \* education

Life happiness = b \* distribution + d \* security + f \* age + h \* income + j \* education

(2) Measurement models:

$$Q10 = \beta 1 * job + e1$$

$$Q11 = \beta 2 * job + e2$$

$$Q12 = \beta 3 * life + e3$$

$$Q13 = \beta 4 * life + e4$$

$$Q14 = \beta 5 * life + e5$$

$$Q71 = \beta 6 * distribution + e6$$

$$Q72 = \beta 7 * distribution + e7$$

$$Q73 = \beta 8 * distribution + e8$$

$$Q74' = \beta 9 * security + e9$$

$$Q75 = \beta 10 * security + e10$$

Using AMOS 5.0, we obtained results that are presented in Fig. 3 and Table 6 Model 2 (columns 5 and 6). Comparing model 1 and model 2, model 2's GFI is worse than model 1's, but its RMR is better than model 1's, suggesting that after introducing demographic variables, errors decreased, which can be confirmed by comparing error terms of model 1 and model 2.

#### 5.2 Results

#### 5.2.1 Income Distribution

After adding demographics, effects of perceived fairness of income distribution policies on both life and work satisfaction were still positive and significant. Higher perceived income disparity was related to lower subjective well-being. However, compared to model 1, the effect of distribution on work satisfaction decreased from model 1's 0.551 to model 2's 0.116, while the effects on life satisfaction were similar in the two models (Table 6).

# 5.2.2 Social Security

Effects of social security policy fairness on both life and work satisfaction were significant after adding demographic variables in model 2 but intensities of the effects were different



Fig. 3 Estimated structural models after integrating demographic variables

for life and work satisfactions. Compared to model 1, the effect on life satisfaction increased in model 2, from 1.256 to 1.841, while the effect on work satisfaction decreased, from 0.697 to 0.246. Considering the above results, effects of both social security and income distribution on work satisfaction decreased, which may be due to adding the demographic variables to the model.

## 5.2.3 Age

Compared to the mid-aged, work satisfaction of the young was not significantly different, but that of the old was significantly different (0.387), which suggests work satisfaction of older people is lower than that of young and mid-aged people. In terms of life satisfaction, compared to the mid-aged, the estimated coefficients were -0.148 and -0.122, respectively, suggesting life satisfactions of young and old people are higher than that of the mid-aged. This finding is consistent with the research among Americans and English that age and happiness follows a U-shape pattern and the bottom point is at about age 40 (Blanchflower and Oswald 2008). Social and economic transition in China is the major reason for the mid-aged being the most unhappy people. Since the economic reform, education, housing, healthcare, and retirement systems are reforming, the mid-aged

experience the largest shocks of these reforms, which is why their subjective well-being level is the lowest.

## 5.2.4 Income

Compared to middle income people, the estimated coefficient of work satisfaction for the low income group was positive (0.268) and for the high income group was negative (-0.122), suggesting that income has a positive association with subjective well-being; higher income people reported a higher level of work satisfaction. The association between income and life satisfaction follows the same pattern. Lower income people reported a lower level of life satisfaction. Then the low income group had the lowest work and life satisfaction.

In addition, we found an increase in the effect of personal income satisfaction on the latent variable, work satisfaction. After considering demographics, the effect of personal income satisfaction increased from model 1 to model 2 (1.103–4.103). In other words, after considering demographics, the effect of income satisfaction on work satisfaction increased more than four times, which may be caused by both low income group's low satisfaction level and high income group's high satisfaction level.

# 5.2.5 Education

Compared to the high school group, the middle school or lower education group's work satisfaction was lower (0.101) while the university or higher education group's work satisfaction was not significantly different. For life satisfaction, the three education groups had no significant differences.

#### **6** Discussions and Implications

This study has examined the associations between perceived fairness of social policies and subjective well-being among a sample of Chinese people in Beijing. The results from structural equation modeling supported hypothesis 1. Specifically, the fairer people perceive income distribution and social security policies, the higher their subjective wellbeing. Besides, results also indicate that, satisfaction with income distribution policies have the most impact on work satisfaction, while satisfaction with social security policies have the most impact upon life satisfaction.

When demographic variables are introduced in the structural model, impacts on both policy evaluation variables have decreased. The findings show that subjective well-being and income have a positive association that supported hypothesis 2. For both work and life satisfaction, the high income group has rated the highest, the middle income lower, and the low income the lowest, which suggests given other conditions, income plays a decisive role in subjective well-being.

Different age groups show different patterns of subjective well-being. Young people express both high work satisfaction and high life satisfaction, the middle-aged indicate comparatively high work satisfaction but comparatively low life satisfaction, while the old show comparatively high life satisfaction but low work satisfaction. The middle-aged comparatively low life satisfaction is related to social security and income distribution policies. In order to pay children's tuitions, mortgage, and aging parents' medical

expenses, the middle-aged have to work hard and live frugally, without time to enjoy their own life. The findings partially supported hypothesis 3.

Education is related to work satisfaction only. People with high school or higher education have higher work satisfaction than those with lower education. But education is not related to life satisfaction. Then hypothesis 4 is partially supported.

Information about perceived fairness of social policies by ordinary people is helpful for policy makers. Social security and income distribution policies have important impacts on people's subjective well-being. We can see from subjective well-being whether these policies are people-oriented and supported by people. Therefore, well-being should be an objective of social security and income distribution policy making.

Income is a major factor in deciding well-being; economic development is still essential. No doubt that happiness is important, but we do not over-emphasize it by ignoring GDP. The improvement of social security and justice of income allocation rely on economic development and the continuing accumulation of social wealth. Only through adequate economic development can a social security system be enhanced and an income distribution mechanism be improved. Then people can enjoy a long-term, stable wellbeing.

As for social security policies, the government should further emphasize healthcare and education. It should fully secure people's right to receive education and introduce free education step by step; fully guarantee the right to access basic healthcare and public sanitation, enable people to afford medical payments and obtain health services equally; and also assure the right to afford a residence. We are not suggesting that government should provide free housing to all people; however, government has its inevitable responsibility for controlling housing prices and improving living conditions.

As for income distribution, while the government is emphasizing the function of redistribution, it should also interfere with the primary distribution in the labor market to ensure its justice, protect labor rights, and improve work satisfaction of low-income and low-education workers. Besides, long term goals of government should not only pursue economic growth and achieve national goals, but also improve people's living conditions and subjective well-being.

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