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Author: Yizhang Zhao Yaojun Li Anthony Heath Nick Shryane

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Inter- and Intra- generational Social Mobility Effects on Subjective Wellbeing - Evidence from Mainland China

Yizhang Zhao[a,*]

[a] *Humanities Bridgeford Street Building*
Department of Social Statistics, University of Manchester
Manchester, UK, M13 9PL
yizhang.zhao@manchester.ac.uk

Yaojun Li[b]

[b] *Humanities Bridgeford Street Building*
Department of Sociology and Cathie Marsh Institute for Social Research, University of Manchester
Manchester, UK, M13 9PL
yaojun.li@manchester.ac.uk

Anthony Heath[c]

[c] *Nuffield College, University of Oxford*
Oxford, UK, OX1 1NF
anthony.heath@nuffield.ox.ac.uk

Nick Shryane[d]

[d] *Humanities Bridgeford Street Building*
Department of Social Statistics, University of Manchester
Manchester, UK, M13 9PL
n.shryane@manchester.ac.uk

[*] Corresponding author

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Abstract

This paper contributes to the literature on wellbeing research by showing the distinct impacts of inter- and intra- generational social mobility on subjective wellbeing in mainland China. Based on the China General Social Surveys of 2006, we used diagonal reference modelling and other regression methods to assess the effects of social mobility on wellbeing. We found that wellbeing was associated with changes in class positions. In both inter- and intra-generational mobility trajectories, moving upward into a higher position was beneficial for people's wellbeing whereas different consequences were found for downward mobility: in the case of intergenerational mobility, downward mobility into the manual class did not have a marked effect on people's wellbeing as the downwardly mobile from privileged backgrounds held the prospect of counter-mobility at early career stages and inherited valuable resources; but downward mobility in one's own career life was rather detrimental to subjective wellbeing, as the downwardly mobile had to bear not only the material disadvantages found in the lower position, but also the psychological effects ensuing from the downward trajectory. We conclude that while those experiencing downward intergenerational mobility may resort to family advantages to help maintain their wellbeing levels, a similar trajectory in one's own career life may have a direct negative consequence.

Keywords

Subjective wellbeing; inter- and intra-generational social mobility; diagonal reference model; China

1. Introduction

Among all the research areas in social sciences, the pattern and determinants of people's subjective wellbeing is one of the most pressing concerns that captures interdisciplinary attention. Different from objective wellbeing, which is measured by various objective indicators, subjective wellbeing (SWB)[i] emphasises individuals' subjective perceptions. It goes beyond the description of physical living circumstances and focuses on individuals' evaluation of their lives using their own standards, and thus has become a focus of social science research (Schneider, 1976; Diener and Suh, 1997; Diener et al., 1999). With regard to the influence of social mobility on SWB, both psychological and sociological perspectives shed light on this, but empirical studies have been rather limited. Recently, however, a series of studies have been conducted on this issue which have enhanced our understanding of the complicated and interwoven factors involved in SWB (Houle 2011; Houle and Martin 2011; Nikolaev and Burns 2014; Hadjar and Samuel 2015; Daenekindt, 2016; Zang and De Graaf, 2016). Yet, these studies, based as they are on different societies, also show mixed results. For example, intergenerational upward mobility could bring either positive or negative influence on SWB, and intra-generational downward mobility showed no effect in some cases but positive effect in others. In order to achieve a better understanding of the influence of social mobility on SWB, further work is needed on two aspects: first, to comprehensively study inter- and intra- generational mobility and examine the difference between the two; second, to explore mechanisms underlying the mobility effects as revealed so that future scholars can be better informed as to whether the divergent results might have ensued from different research methods adopted or from the different social contexts studied. In this study, we attempt to contribute to the ongoing debate by examining the impact of both inter- and intra- generational mobility trajectories on SWB in the case of China and, in addition, we explore potential reasons for SWB undergoing different mobility trajectories.

China provides a good case for examining the relationship between social mobility and SWB, and that for many reasons. We list two here as an illustration. First, a high mobility rate has occurred in the last few decades, which brings the effect of social mobility into central concern. Since the 1980s, China has been experiencing a rapid and profound industrialisation and marketization process. As a result, secondary and tertiary industries have been accounting for an increasing part of the economy, and fundamental changes have occurred in the occupational structure, bringing fast economic growth and a high mobility rate to the Chinese society. At the same time, social inequality has been increasing quickly, and the disparities between people in different class positions become increasingly salient, suggesting that moving into a higher or lower class position is likely to become more consequential for people's SWB than before. This process shares many features with those witnessed by many developed countries in their own histories, except that China's social transition occurred at a very fast speed and on an unprecedented scale, which makes it easier to observe the changing rates of social mobility and its impacts in a relatively short time period, say, within one or two generations.

Second, China offers us an opportunity to examine the issue in a transitional social context where class boundaries have not been consolidated. As the social transition process is still underway, the class boundaries have not been fully formed in the Chinese society, which may relatively ease social mobility with fewer obstacles than in other societies with entrenched class divisions (Goldthorpe, Llewellyn and Payne, 1987; Erikson and Goldthorpe, 1992; Li and Devine, 2011; Li and Heath, 2016). Looking at the case of China will not only enrich empirical studies on this issue, but will enable us to examine how social mobility exerts its impact in different contexts and under different conditions, which will give us a deeper understanding of the influence of social mobility.

Based on the data of the 2006 China General Social Survey (CGSS) we show that in both inter- and intra- generational mobility, the upwardly mobile from the manual class into the salariat and intermediate classes have their SWB levels similar to those of the stable members in the higher classes, which were significantly higher than those of stable manual class members, while for people downwardly mobile from higher classes into the manual class, inter- and intra- generational mobility experiences tend to produce different results on SWB. Intergenerational downward mobility, even that of a long-term kind, does not necessarily lead to a marked reduction in SWB, and this can be explained by the prospect of counter-mobility for those at early career stages and by the material protection provided by the inherited resources. By contrast, downward mobility in one's own career is often quite detrimental to one's SWB. We interpret this latter finding as being a consequence not only of the disadvantages embedded in the lower position, but also of the inherent negativity on one's mental state of the downward career trek itself.

The paper begins with a brief literature review of psychological and sociological theories on SWB, followed by a review of the data and methods before we present the results. After that, we shall discuss the implication of our findings in the final section.

2. Literature review

In the past few decades researchers from different disciplines have been exploring mechanisms of subjective well-being (SWB). From different perspectives, quite complementary and yet occasionally competing theories have been put forward. In this part, we give a brief review of the relevant theories in psychology and sociology, based on which our hypotheses will be formulated and tested.

Psychologists have been playing a leading role in SWB-related research. Various psychological processes and mechanisms underlying SWB have been explored and quite a

few theories developed. Two of these theories have gained widespread influence: *the dynamic equilibrium theory* and *the social comparison theory*.[ii] According to the former, every individual has a 'set-point' of wellbeing which is determined by genetics and personality. People's level of wellbeing may be temporarily deflected as a reflection of good or bad life events, but with the aid of psychological mechanisms such as adaptation and goal changing, it will tend to return to the set-point level over time and a dynamic equilibrium of SWB is thus maintained (Diener and Larsen, 1984; Costa et al., 1987; Cantor and Sanderson, 1999). Scholars have proposed slightly different versions of explanation and resorted to various metaphors, such as 'hedonic treadmill' (Brickman and Campbell, 1971) and 'subjective wellbeing homeostasis' (Cummins and Nistico, 2002), to refer to the different facets of the broad concept.

The social comparison theory, on the other hand, views SWB in a relational perspective. According to this theory, people's wellbeing does not depend solely on their own situation, but on the situation of other people with whom they may compare themselves. Diener and Fujita (1997: 329) stated that 'If people's lives compare favourably to a socially derived standard they will be satisfied and experience positive emotions', otherwise, they 'will be dissatisfied and suffer from unpleasant emotions such as sadness and anxiety.' Recent studies depict social comparison as a more fluid and strategic process where people have much flexibility in selecting reference groups and avoiding negative comparisons (Kruglanski and Mayseless, 1990; Lyubomirsky and Ross, 1997). Nevertheless, the subjective coping mechanisms are not omnipotent and the influence of objective social position cannot be fully offset. Since people with a higher social position are more likely to gain positive feedback, greater respect and higher self-esteem in social comparisons, they tend to be more satisfied with themselves, a phenomenon which has been verified in many empirical studies (Easterlin, 1974; Headey and Wearing, 1991; Fahey and Smyth, 2004).

In brief, dynamic equilibrium and social comparison theories shed light on the underlying psychological mechanisms of SWB from complementary perspectives: the former employs a diachronic perspective and emphasises the stability of SWB across the life course, while the latter uses a synchronic and comparative perspective where a gradient of wellbeing across different social positions can be delineated. Combining these two perspectives, one may ask: what features of SWB should be expected for people with mobility experiences between different social positions? According to the dynamic equilibrium theory, no significant effect of social mobility is likely to ensue as the person will sooner or later adapt to the new position. In other words, people with mobility experiences may have no significant difference in SWB from those who remain stable in their social positions either intergenerationally or over their own life course. But following the social comparison theory, a significant effect of social mobility on wellbeing would be expected, featuring the mobile differently from the stable. The question is in what direction and to what extent, and whether for one or both of inter- and intra- generational mobility trajectories. This question may also have a social policy implication: if moving to higher or lower positions has little consequence for wellbeing, then personal striving for higher social positions or societal pursuit of more mobility opportunities may not receive moral priority.

In this regard, economists made important contributions by exploring a different yet related issue, namely, with regard to how changes in personal income might influence people's SWB. In terms of the synchronic relationship, the overwhelming majority of studies have found a positive association between income and SWB. For instance, Stevenson and Wolfers examined the relationship in over 100 countries and 'have yet to find a statistically significant exception' (2008: 12). With regard to the relationship in diachronic studies, i.e. the effect of income change on wellbeing, there are some divergent findings. Some researchers such as Easterlin (2003) maintain that an income increase may not lead to a

corresponding rise in SWB whilst others believe that there may be a curvilinear relationship between income and SWB: individuals' income growth has a greater impact on poor people's SWB, but when the basic needs are satisfied, the marginal effect will decrease such that its importance will become rather trivial beyond this level (Veenhoven, 1991; Diener et al., 1993). The psychological device of adaptation is assumed to be the main reason for this, namely, that people get accustomed to their higher income levels fairly soon and adjust their aspirations accordingly. In contrast, the extent of adaptation to changes in other life domains such as family life and health tends to be less complete. Therefore, Easterlin (2003) appealed to a redirection of emphasis in favour of the non-material domains rather than incessant pursuit of ever more money, and suggested that public policy should focus more on 'changing individual preferences' than on 'altering the socioeconomic environment' (Easterlin, 2003: 11182).

A weakness in these arguments is that income growth only reflects absolute changes in wealth or living conditions, but misses the crucial dimension of people's relative standing in a society's socio-economic hierarchy. In an attempt to address this weakness, many scholars subsequently incorporated the concept of relative income, compared its effect with that of absolute income, and made important findings. For instance, Frey and Stutzer found that 'it is not the absolute level of income that matters most, but rather one's position relative to other people' (Frey and Stutzer, 2010: 85). However, even in relative terms, income captures only one, albeit important, facet of the overall disparities in people's socio-economic positions. Coming from a different perspective, sociologists tend to use concepts such as social class and social status in order to provide a more comprehensive view of social position and of economic inequality that derives from one's class position (Goldthorpe and McKnight, 2006). Seen from this perspective, different class positions indicate systematic differences not only in absolute and relative income, but also in economic security, stability and long-term

prospects. Furthermore, as social classes are usually defined with fairly clear boundaries, the changing trajectory of social position, i.e., social mobility, can be traced and measured in both prospective and retrospective manners, and both across generations and over one's life course.

In sociological theories, two aspects of social mobility impact have been discussed: the position effect and the mobility effect. First, according to *the acculturation theory* proposed by Blau (1956), both the origin and the current class positions exert certain influences over people's behaviour, mind-set and value system, and therefore the manifestation of such behaviours and life perceptions by mobile groups is expected to be intermediate between that of the non-mobile groups. Underlying the perceived life experiences is the presumed importance of socialisation processes: people may be continuously affected by their past personal experience whilst subsequent changes in social positions may also exert impacts. Such a pattern has been found in studies on fertility rates and voting behaviour (Sobel, 1981; Clifford and Heath, 1993), which may also apply to people's SWB[iii]. Second, *the dissociation theory* by Sorokin (1959) focused on the process of mobility and its consequences. Sorokin maintained that moving into different social positions, whether upwardly or downwardly, would inhibit social integration and increase people's mental stress, and may thus engender a negative effect on people's wellbeing. Other scholars also mentioned that mobility might render the maintenance of previous social connections untenable, that sustained efforts must be made to adjust to new norms and cultures, and that permanent mental strain might be created in some cases if the mobile who are uprooted from their familiar niche are not accepted by their new social circles (Schneider and Homans, 1955; Lipset and Bendix, 1959). From this perspective an independent impact from the mobility experience may manifest itself over and above the influence of positions. This idea has been further developed by differentiating the effect of downward mobility from that of upward mobility. As a higher

class position is generally associated with a superior material living standard and a sense of self-fulfilment, the bonus of a higher position may offset or even outweigh the potential negative effect of upward mobility. In contrast, downward mobility may engender detrimental impacts such as, in Newman's words, 'feelings of anger or dismay, a sense of injustice – these are the responses to downward mobility shared by most of its victims' (Newman, 1999: 229). Accompanied by disadvantages of a lower position are senses of unfairness, frustration and pessimism, making downward mobility a big threat to individuals' wellbeing (Newman, 1999; Anderson et al., 2012).

Combining the sociological, economic and psychological theories discussed above, we can formulate the following hypotheses:

Hypothesis 0: Mobility experience between different social positions will not have any enduring effect on SWB level as the equilibrium theory would envisage. Other things being equal, people having mobility experiences are not expected to have any significant difference in SWB from those who stay stable because any such effects will be short-run and people will soon adapt to their new situation and return to their usual level of subjective wellbeing.

Hypothesis 1: People's current class position will have a dominant effect on their SWB whereas their origin class would have little effect. This is because, as the social comparison theory would suggest, people's SWB is mainly determined by comparison with others and therefore their current social position is of chief importance.

Hypothesis 2: People's SWB level will be influenced by both their origin and their current class positions, and hence the SWB level of the mobile will lie in between that of stable members in their origin and destination classes. Mobility, as the acculturation theory would predict, would lead to an intermediacy in the wellbeing levels.

Hypothesis 3: Mobility will, as the dissociation theory would argue, have a negative effect on people's wellbeing regardless of the direction of mobility but the impact will be more serious for those who experience downward mobility.

The various theories from psychological, economic, and sociological perspectives as discussed above may seem straightforward to address and indeed earlier researchers tend to use conventional methods such as regression in assessing the mobility effects on SWB (Ellis, 1952; Hollingshead et al., 1954; Ellis and Lane, 1967; Wegner, 1973). And even some of the more recent efforts followed suit and suffered from similar methodological deficiencies. For example, Nikolaev and Burns (2014) found that in the United States intergenerational upward mobility was associated with positive outcomes in wellbeing while downward mobility had a negative effect. Hadjar and Samuel (2015) compared the effects of upward mobility on life satisfaction using datasets from the UK and Switzerland and found a negative effect of intergenerational mobility in the UK sample but no mobility effect in the Swiss sample.

The most appropriate method for addressing this kind of research question is, to the best of our knowledge, the diagonal reference modelling (DRM) developed by Sobel (1981, 1985). We shall discuss the method in greater detail below. For the moment, it suffices to say that this is a method that allows researchers to assess both position and mobility effects simultaneously and that in terms of both their direction and magnitude. Since its invention, DRM has been applied to quite a few social domains such as mobility influences on fertility rates, voting behaviours, and social attitudes (De Graaf and Heath, 1992; Weakliem, 1992; Clifford and Heath, 1993; De Graaf et al, 1995; Sobel et al, 2004; Tolsma et al, 2009). However, this approach has been seldom employed in SWB-related research, and the few previous studies showed mixed results in both inter- and intra- generational mobility effects.

For instance, Marshall and Firth (1999) examined the mobility effect on life satisfaction in ten countries, finding an acculturation effect in three out of seven life domains, but an overall

weak association between mobility trajectory and life satisfaction. Using the 1957 Wisconsin Longitudinal Study, Houle and Martin (2011) looked at intergenerational mobility effects on people's psychological distress, finding an equivalent effect of origin and destination classes and a very small mobility effect, the latter manifesting itself only among men who left farming. A similar study by Houle (2011) on the relationship between intragenerational mobility and psychological distress showed that current class had a dominant effect but no mobility effect was detectable. More recently, Daenekindt (2016) studied intergenerational mobility effects on mental health using survey data from Belgium, and found an acculturation effect among the upwardly mobile and a detrimental effect of downward mobility. The most recent study to our knowledge is conducted by Zang and de Graaf (2016) who investigated inter- and intra- generational mobility effects on happiness in China. They found no effect from intergenerational mobility but a significant positive effect of intragenerational downward mobility. They used the term 'satisfied losers' to describe the experience of those who experienced downward mobility in their working lives, a finding which has not been shown before in any other studies we are aware of.

Another notable feature in the previous research using DRM is that the scholars seldom explored the mechanisms underlying the relationships between social mobility and SWB. In this paper, we use China as a case study to test the proposed hypotheses. We seek to explore whether or not social mobility (both inter- and intra- generational mobility trajectories) has influence on SWB, and if yes, what mechanisms are underlying the relationships.

3. Data and variables

The empirical analysis is based on data from the 2006 Chinese General Social Survey (CGSS2006). The CGSS is the first nationwide cross-sectional survey in mainland China, which has been conducted annually or biennially since 2003 by Renmin University and Hong

Kong University of Science and Technology. It uses a multistage stratified sampling method and covered 28 provincial units (except for Tibet, Qinghai, and Ningxia) in mainland China. We used data from the 2006 survey as it contained several questions on SWB. The total sample size was 10151.

We dealt with missing values in the following steps. First, as class positions in this study are derived from occupational information, respondents with missing values for their own job were not included in the analysis. This eliminated 1270 cases, including full-time students, housewives, and the 'never employed'. For the remaining 8881 cases, information on their fathers' and their own first and current occupational titles and employment status was used to derive origin, first-job and current class positions for analysis of inter- and intra- generational mobility effects on SWB. Our working sample consisted of 8381 and 8857 individuals for inter- and intra- generational mobility analyses respectively.

The key variables are introduced below. *Subjective well-being* (SWB) reflects individuals' subjective perceptions and evaluations. This is a psychological process for which researchers have proposed various methods of measurement. Existing studies mainly employ two basic approaches - the affective emotion approach which emphasises perceptions and affective feelings and which are measured using emotion records (Bradburn and Noll, 1969), and the cognitive evaluation approach whereby researchers typically use self-reported evaluations of overall life as well as of specific life domains. The CGSS2006 contains questions following the cognitive approach, with an overall SWB question and a serial question on life satisfaction in eight domains for capturing people's levels of SWB. The question for overall wellbeing was worded: 'Overall, how do you feel about your life?' It has five ordered response categories: 1 'Very unhappy', 2 'Unhappy', 3 'Neutral', 4 'Happy', and 5 'Very happy'. We used the response to this question as our outcome variable (a sensitivity analysis

conducted using factor scores derived from the eight domains produced essentially the same findings).[iv]

Class position was measured by recourse to information on occupation and employment status. The 'first-job class', 'current class' and 'origin class' were generated from respondents' reports of their first job, current job, and fathers' job when the respondent was at age 18 respectively. Intergenerational mobility was reflected by the trajectory from origin to current classes and intragenerational mobility from first to current class positions.

The original information on occupational titles was first recoded into the 4-digit ISCO88 categories (International Labour Organisation, 2015), and then transformed into the 11-category EGP schema (Erikson, Goldthorpe and Portocarero, 1979; Ganzeboom and Treiman, 2015). The schema differentiates 11 categories according to employment relations and mode of regulation. The 11 categories were collapsed to a threefold schema for use in this analysis on account of cell sizes and reliability of estimates. The three classes are: higher- and lower-grade professionals and managers (Classes I and II) and employers (Class IVa) as the 'salariat class'; higher- and lower- grade of routine non-manual workers (Classes IIIa and IIIb), own-account (Class IVb) and forepersons and lower technicians (Class V) as the 'intermediate class', and skilled and unskilled manual workers as well as agricultural workers (Classes VI, VIIa, VIIb and IVc) as the 'manual class'. Despite the fact that the threefold schema may overlook some differences within each of the broad categories, it has two advantages: first, categories in the full schema are not strictly hierarchical, making it difficult to define directions of mobility, whereas the threefold division could be 'more-or-less equally well taken as ordering class positions in terms of their prestige, socio-economic status, or "general desirability"' (Erikson and Goldthorpe, 1992: 45); and secondly, using a threefold schema avoided small cell frequencies in the statistical analysis.

During China's occupational upgrading, upward mobility is the mainstream whereas the downward mobile are in the minority. By using this three-fold schema, both inter- and intra-generational mobility tables have adequate counts in each cell. The three-fold schema has one notable drawback when applied to China's social context, namely, that the 'manual' sector as defined contains both urban manual workers and rural agricultural workers. While both types of worker are engaged in manual work, the former may have urban household registration status (*hukou)*[v]and enjoy greater state protection than do the latter. However, as the overall trend of mobility in the last few decades is upward, downward mobility is rather limited in scale and that to agricultural work is almost non-existent. Given the situation, we will include *hukou* status as a control variable in the analysis. More details are introduced below.

Control variables include gender, age, age-squared and marital status. In addition, changes in *hukou* status will be included. In the Chinese context, rural residents and their counterparts in urban areas are systematically segmented social groups with different social statuses, material living standards, and access rights to social insurance. In order to pick up the difference between these two groups which might be overlooked in the threefold class schema, a categorical variable indicating *hukou* types and changes will be controlled for in the statistical analysis. People with stable rural *hukou* are set as the reference group, with whom those changing from rural to urban and the stable urban residents will be compared.

(Table 1 about here)

Table 1 shows the descriptive statistics for the variables used in this paper, based on different analytical samples for inter- and intra- generational mobility analysis in Section 5.1 and 5.2, and for sub-sample analysis in Section 5.3, respectively. For continuous variables,

means and standard deviations are displayed; for categorical and dummy variables, the percentage for each category is listed.

4. Method and models

We now give a brief account of the methodological issues involved in studying the consequences of mobility. The deficiency of the traditional regression model is due to the multicollinearity problem: class mobility is measured by the difference between origin and current class positions. As such, the effects of origin class, current class and class mobility cannot be analysed simultaneously (Hendrickx et al., 1993; Houle, 2011).

Several attempts were made to meet this challenge. Duncan (1966) proposed the square additive model using ANOVA techniques, in which the variance of the square matrix was explained by the row and column effects measuring the average impact of the prior and the current social position respectively, plus interaction terms indicating particular combinations of positions that were interpreted as the mobility effects. However, as Hope (1971) and Clifford and Health (1993) pointed out, Duncan's model is flawed because some mobility effects have been incorporated in the main effects. For instance, respondents in a given destination class include both stable and mobile members, and the mobility effect may not be properly tested in the square additive model because the estimation of the destination effect may incorporate it in its own variance, and that is part of the reason why the majority of empirical studies did not detect any mobility effect using this model (Jackson and Curtis, 1972). To correct such deficiencies, Hope (1971, 1975) designed a halfway difference model named 'the diamond model' where an overall status dimension was generated to replace the separate position effects, but this was criticised both theoretically and methodologically (House, 1978; Sobel, 1981; Hendrickx et al., 1993). In essence, Hope's model restates the

effects of the two positions with disparate strengths, and therefore has no more explanatory power than does a linear regression model.

Research on mobility effects could not well proceed until Sobel (1981, 1985) developed the diagonal reference model (DRM) which offered a means of measuring the mobility effects over and above the position effects. The underlying idea of DRM is derived from Blau's acculturation theory that an individual's current attitudes and values are influenced by both their prior and current classes. Beyond that, social mobility may have independent effects that are 'systematic influences which are left after the process of acculturation (socialization to reference norms) has been modelled' (Sobel, 1981: 896). In order to capture the mobility effect, the acculturation process has to be parametrised in the first place, which requires choosing proper referents whose attitudes and values typify a certain class and can be set as benchmarks to which other people's attitudes and values can be compared. In DRM, the stable members of each class are assumed to represent the core norms of the class and set as referents. As Sorokin (1959: 509) pointed out, 'if we want to know the characteristic attitudes of a farmer, we do not go to a man who has been a farmer for a few months, but go to a farmer who is a farmer for life.' Hence, in the DRM framework, each mobile member has two referents – the stable members of his/her origin class and the stable members of his/her current class, and the expected values of his/her behaviours and attitudes will be estimated by the values of these two reference groups.

The basic logic of DRM is reflected in the baseline model:

$$\hat{u}_{ij} = w_{orig} * u_{ii} + \left(1 - w_{orig}\right) * u_{jj} \qquad \left(0 \le w_{orig} \le 1\right), \tag{1}$$

where $\hat{u}_{ij}$ is the estimated mean value in cell ij (with origin class i and destination class j); u_{ii} represents the typical value of the stable members of class i, and u_{jj} is the typical value of the stable members of class j; w_{orig} is the salience parameter, representing the weight of

origin class, and (1- w_{orig}) is the weight of destination class. Therefore, the expected value of people in cell ij is a weighted combination of the estimated values in cell ii and cell jj.

The baseline model estimates a single w value, with a restrictive assumption of an identical pattern of influence applying to all movements between classes. Considering the theoretical possibility that the relative salience of origin versus destination class may vary for people in different classes, Sobel proposed two general versions where w is allowed to vary:

$$\hat{u}_{ij} = w_{orig.i} * u_{ii} + (1 - w_{orig.i}) * u_{jj} \qquad \left(0 \le w_{orig.i} \le 1\right) \qquad (2a)$$

$$\hat{u}_{ij} = \left(1 - w_{des.j}\right) * u_{ii} + w_{des.j} * u_{jj} \qquad \left(0 \le w_{des.j} \le 1\right) \qquad (2b)$$

In spite of the similar form, the two models have different implications. Model 2a allows a specific w value for each origin class, thus people from the same origin class will have the same weight parameter, regardless of their destination classes whereas Model 2b estimates an independent w value for each destination class such that the weight will be the same for those in the same destination class, no matter which prior classes they come from (Weakliem, 1992). Specific to the present study, Model 2a assumes that each prior position has its special salience in shaping the descendants' wellbeing, and the extent to which an individual's current class affects his/her wellbeing depends on how much 'space' is left by his/her specific prior position. In contrast, Model 2b assumes that each destination class owns its specific shaping power, and the extent to which an individual's prior position may retain its impact is dependent on how much 'space' is seized and occupied by his/her current position. In other words, Model 2a emphasises the effect of the prior position while Model 2b highlights the effect of the current position. To avoid the redundancy of writing two sets of formulae in the following paragraphs, the following models will be based on Model 2b.

In order to test whether there are independent mobility effects over and above the acculturation influence, a competing model (Model 3) is formulated as follows, where upward mobility and downward mobility are examined separately:

$$\hat{u}_{ij} = \left(1 - w_{des.j}\right) * u_{ii} + w_{des.j} * u_{jj} + \beta_1 Up_{ij} + \beta_2 Down_{ij} \quad \left(0 \le w_{des.j} \le 1\right), \qquad (3)$$

In the previous models, a default assumption has been made: all diagonal variability in the response variable is attributable solely to unobservable random effects and not to any covariates. In Model 4, the aforementioned control variables are included and the formula becomes:

$$\hat{u}_{ijk} = \left(1 - w_{des.j}\right) * \left(\alpha_i + \beta_i X_{ijk}\right) + w_{des.j} * \left(\alpha_j + \beta_j X_{ijk}\right)$$

$$+ \gamma_1 Up_{ij} + \gamma_2 Down_{ij} \quad \left(0 \le w_{des.j} \le 1\right)$$

This is a general model where β coefficient for each control variable is separately estimated for each diagonal cell. If the control variables are assumed to have constant impacts across different classes, the equation can be simplified as:

$$\hat{u}_{ijk} = \left(1 - w_{des.j}\right) * \alpha_i + w_{des.j} * \alpha_j + \beta X_{ijk} + \gamma_1 Up_{ij} + \gamma_2 Down_{ij} \quad \left(0 \le w_{des.j} \le 1\right) \qquad (4)$$

Having discussed the theoretical and methodological issues, we are going to present our findings. But before that, a limitation of the DRM approach needs to be pointed out, namely, that using this method, the manifestations of the stayers are taken as referents to estimate those of the movers, but the movers may have attributes which may not, or even cannot, be fully captured or represented by the stayer groups and thus cannot be represented by the DRM framework. This shortcoming notwithstanding, we considered DRM as the most appropriate approach for the current study. The models were estimated with the constrained nonlinear regression (CNLR) commands in SPSS, and the residual sum of squares (RSS) of different models can be compared by a standard F-test.

5. Results

5.1 Descriptive analysis

Table 2 shows the mean value of overall wellbeing in each cell of the intergenerational mobility table. The shaded cells in the 3*3 table represent the average wellbeing level for non-mobile members in each class. A clear gradient of wellbeing is shown across the diagonal cells, showing that a higher social position is associated with a higher wellbeing level[vi], which reaffirms the cross-sectional relationship revealed by previous studies (Headey and Wearing, 1991; Fahey and Smyth, 2004). Furthermore, an asymmetrical pattern can be observed in the values of the off-diagonal cells. Specifically, the average SWB level of people who moved upward from the manual to the salariat class (the bottom left cell) was basically the same as that of the stable salariat class and appreciably higher than the value of the stable manual class, while the mean score of the downwardly mobile into the manual class (the top right cell) was intermediate between that of the stable salariat and stable manual class members.

(Tables 2 and 3 about here)

Turning to the SWB distribution in intragenerational mobility (Table 3), two similar features can be seen. First, the wellbeing gradient runs down the diagonal; second, people who were upwardly mobile into the salariat class had a similar wellbeing level to that of the stable salariat members. However, people who moved downwardly into the manual class had the lowest SWB level, even lower than the stable manual class, which is quite different from what is seen in the intergenerational mobility.

5.2 Multivariate results

The results in the descriptive analyses suggest different patterns between inter- and intra-generational mobility. In order to carry out formal tests and further analysis, DRM was used and the results are shown in Table 4. The baseline model (Model 1) for intergenerational mobility shows that the overall weight for origin class (w) is significantly different from 0. The coefficient for the origin weight (w), though, is rather small (0.235), implying that the destination class had a dominant effect on people's level of wellbeing. After w was allowed to vary across different destinations (Model 2)[vii], the model fit was significantly improved. The values of $w_{salariat}$ and $w_{intermediate}$ representing the origin weights on these two destinations are very small and not significantly different from 0 (0.053 and 0.038), whereas w_{manual} for origin weight on the manual destination has a substantially large and significant weight (0.630), confirming the asymmetric pattern as observed previously. Specifically, for people in the salariat and intermediate classes, their SWB level was overwhelmingly shaped by their current positions while the influence of the origin class was rather trivial. For people currently in the manual class, however, their wellbeing level was largely influenced by where they come from. Thus the higher their origin class, the happier they were. Model 3 includes two variables indicating different mobility trajectories, upward and downward, but the model comparison showed no significant improvement in fit, and neither coefficient was significantly different from zero, thus the hypothesis of extra mobility effects was rejected and the mobility variables were removed from the following model. Control variables were incorporated in Model 4 where we can see that the asymmetric pattern does not change much.

In sum, in the case of intergenerational mobility, the salariat and intermediate classes had a significant capacity for shaping new entrants' SWB in that whatever origin they come from, people who moved into salariat and intermediate classes showed very similar SWB levels to those of the stable members of these classes. This partly supports social comparison theory in that it is the current class that has the dominant effect and thus moving to a higher class

position would have a positive impact on people's wellbeing. But for people downwardly mobile to the manual class, their origin position retained a substantial and significant effect on their wellbeing level, which provides some evidence for acculturation theory.

(Table 4 about here)

With regard to intragenerational mobility, the overall estimate of w in the baseline model (Model 1) is 0.039, showing a rather trivial effect of the first-job class. Following the procedure as employed in the previous section, Model 2 allows w to vary across different destination classes, but this did not improve the model fit as shown in the model comparison ($p = .316$). Though $w_{intermediate}$ was significant at the 0.1 level, none of the three w values was significant at the 0.05 level, and given the overall lack of significant improvement in fit for the w variance across destination classes, we decided to drop the terms in the next steps of analysis. Model 3 incorporates two variables indicating the separate effects of upward mobility into the salariat and downward mobility into the manual classes. While no significant effect was found in the case of upward mobility, downward mobility showed a significant negative influence on people's SWB. After adding control variables in Model 4, the basic pattern of mobility effects remained the same.

Compared with the effect of intergenerational mobility, a different pattern thus manifested itself in intragenerational mobility. First, the first-job class had little impact whereas the current position had a dominant influence for all classes. Second, over and above position effects, moving upward into salariat class did not show an extra bonus but being downwardly mobile into the manual class exerted an additional negative effect over and above the disadvantages of the lower position per se, making the wellbeing level even lower than among stable manual class peers.

Combining the two scenarios, we can see that, for both inter- and intra- generational mobility trajectories, the salariat and intermediate classes had a strong shaping power on the current members' wellbeing, so much so that people in these positions were hardly influenced by either their origin or first-job classes. For people in the manual class, however, different patterns emerged: in the case of intergenerational mobility, moving downward to the manual class did not have a particularly serious impact, but if downward mobility occurred during one's own occupational career, it tended to have an extra negative effect in addition to the position disadvantages, leading to the lowest SWB level.

5.3 An exploration of mechanism

In order to better understand the different influences of inter- and intra- generational downward mobility for the current manual class members, an additional analysis was conducted on this sub-group to examine the possible underlying mechanisms for the different effects as shown in the preceding analyses.

In terms of intergenerational mobility, two possible explanations are proposed for the positive acculturation effect of a higher origin class on their downward-mobile descendants. The first is the counter-mobility hypothesis that stresses the asymmetric mechanism of career development: people who have moved into higher classes seldom experience *declassement* thereafter, while people from higher class backgrounds are often found to be the downwardly mobile at early stages as most people start their career from lower positions, but such a downward mobility is often temporary in nature and they can expect, and many do manage, to return to a higher position later in their career life. Yet such an expectation mainly applies to young people before they achieve the stage of occupational maturity at the age of 35 or 40; if they have not been able to achieve counter-mobility by that stage, it is less likely to be achieved thereafter (Goldthorpe, et al., 1980; Clifford and Heath, 1993). We tested this

hypothesis by creating a dummy variable ('Age35') to indicate that the respondents are younger than age 35, and both 'Age35' and its interaction terms with the origin classes were included to see whether the acculturation effect was more salient in the younger group.

The second hypothesis is that members of higher social classes tend to pass on socio-economic-cultural resources (capitals) to their descendants, which may improve their descendants' SWB level. In Blau's original reasoning, the acculturation is enacted in the socialisation process and sustained by the interactions with members in certain classes. Another possible mechanism is that the acculturation pattern is derived from the disparities in possessed resources which may have more explanatory power in interpreting the asymmetrical acculturation pattern. As the data at our possession does not have information on the strength of informal social ties with certain circles, we only test the effects of possessed capitals in this study. We assume that even though members of the manual class may have similar wages from job, those from higher origin classes are more likely to have allowances for house rent/purchase, or direct transfer from parents, and thus tend to have more economic capital than their stable manual class peers. Similarly, they may also possess more political capital (eg. having joined the Chinese Communist Party (CCP) at an early age), human capital (eg. having better support in pursuing a higher education in young adulthood), and social capital (eg. having more social connections with people in advantaged positions), all of which may bring them extra advantages despite the fact that they share the same disadvantaged occupational position with their stable manual colleagues. These additional capitals may contribute to their SWB. The hypothesis was tested by including four indicators: the log incomes, CCP membership, education level, and their social contacts' socio-economic status (ISEI score). We conducted a test of multicollinearity and found that not to be of any main concern (the Spearman's rho for each of these and the outcome variable below 0.15, and no correlation between explanatory variables over 0.30).

With regard to intragenerational mobility, downward mobility may carry with it a certain sense of unfairness, frustration and pessimism, lowering one's SWB. In order to test this hypothesis, we included two variables indicating the sense of fairness about one's current income and the expectation about one's future prospects for upward mobility. In terms of the potential endogeneity problem, our view is that even though the two indicators are a reflection of subjective feelings and evaluations, they measure quite specific attitudes towards one's career rather than any general sense of wellbeing; in addition, the Spearman's rho coefficients between the two variables and the outcome variable are both rather low (0.13 and 0.25 respectively), suggesting no major cause for concern.

Since the position effect and the mobility effect have been differentiated in DRM, regression models[viii] are used to conduct the further tests. As our target group is the manual class members, two categorical variables 'origin class' and 'first-job class' were included, indicating the intergenerational acculturation effect and the intragenerational mobility effect. In the following sub-sample analysis, we used multiple imputation methods for dealing with missing values in the explanatory variables. We also experimented with full listwise deletion method based on the assumption of 'missing completely at random' (Little and Rubin, 1989). The results were basically identical in both analyses. In order to avoid small cell counts when respondents were further divided into groups, especially when the three-step mobility trajectory was constructed in the following analysis, we chose the multiple imputation approach to maximise the sample size. We did not assume an explicit multivariate distribution for all imputation variables, and therefore multivariate imputation using chained equations (MICE) was employed based on univariate conditional distributions of each variable, with fully conditional specifications of prediction equations (Van Buuren, et al., 1999). We included all the variables in our analysis for the imputation step, plus nine auxiliary variables of prospective and retrospective evaluations on different aspects of

personal life, which were supposed to contain information about missingness on several key variables. We generated 20 imputations to guarantee an adequate level of precision (White, et al., 2011). The sample size for the sub-sample analysis is 4905. The model results are shown in Table 5.

(Table 5 about here)

The baseline model (Model 1) confirms the previous findings from DRM, namely, that for the manual class, a higher origin class had a positive, but a higher first-job class, a negative, effect on their SWB. Model 2 includes control variables and the pattern remains basically unchanged. From Model 3 to Model 7, the afore-mentioned hypotheses pertaining to intergenerational acculturation effects are examined. Model 3 tests the counter-mobility hypothesis by including a dummy variable (Age35) and its interactions with origin classes. After adding these three terms, the coefficient for the salariat origin declined from 0.174 to 0.113, and that for the intermediate origin from 0.102 to 0.023. Both interactions are significant, suggesting that the acculturation effects from higher origin classes were more salient for those under age 35 (0.113 + 0.266 = 0.379 and 0.023 + 0.228 = 0.251) than for the older group (0.113 and 0.023), hence the importance of prospective counter-mobility. The estimated levels of SWB by origin classes and the dummy variable 'Age35' are graphically shown in Figure1. In Model 4, 5, 6 and 7, four variables indicating different kinds of capital are included in sequence and are all found as having significant and positive effects. After including these variables, the coefficients for both origin classes became non-significant, but the impacts of first-job classes remained substantial and significant, suggesting different underlying mechanisms for the intragenerational mobility effect. In Model 8 and Model 9, the expectation about one's future social position and the sense of fairness about one's current income are further examined. Both variables are shown to have strong effects on SWB and

their inclusion has led to moderate declines in the coefficients for the first-job classes, providing evidence that intragenerational downward mobility may incur mental stress and thus decrease the level of SWB.

In order to examine the aforementioned effects in a more direct way, a new variable was generated to divide members in the manual class into nine groups according to the 'Origin class – First job class - Current class' mobility trajectory combinations. The previous regression models were rerun by replacing the variables 'origin class' and 'first-job class' by the nine-group mobility trajectories, with the 'Manual – Manual – Manual' as the reference group. Our focus was on Groups 4 and 7, and Groups 2 and 3. In Groups 4 and 7 people were intragenerationally stable manual class members but had a higher origin class compared with the reference group so that the intergenerational mobility effect could be revealed, while people in Groups 2 and 3 had the same origin class with those in the reference group but had experienced downward mobility in their own career, so that the intragenerational mobility effect could be examined. With regard to the remaining four groups, as their origin class and first-job class were both different from the reference group, the results would have contained mixed effects from inter- and intra- generational mobility. We thus focus on Groups 2, 3, 4, and 7. The key results are shown in Table 6.

(Table 6 about here)

As is shown in Model 1, people in Groups 4 and 7 showed significantly higher SWB levels than people in the reference group, whereas people in Groups 2 and 3 showed significantly lower levels of wellbeing, indicating the positive origin effects and negative intragenerational mobility effects respectively. In Model 7, after Age35 and the 'capitals' variables were included, inter-generational origin effects (Group 4 and 7) were no longer significant and

only intragenerational differences (Group 2 and 3) could be detected; when the full set of variables was included in Model 9 we see the disappearance of significant results for all the mobility groups.

6. Conclusion and discussion

This paper examined the potential influence of inter- and intra- generational social mobility on people's SWB in contemporary Chinese society. Two basic conclusions can be derived from the study. First, in both inter- and intra- generational mobility analyses, salariat and intermediate classes showed strong shaping powers on their current members' SWB. This on the one hand suggests that these social positions have inherent advantages for people's SWB; on the other, it implies that moving upward into a higher position is an effective way of boosting wellbeing. As we have seen, the upwardly mobile had a wellbeing level equivalent with that of the stable members of that class, suggesting that the benefits from the current social position could outweigh the disadvantaged backgrounds in shaping people's SWB.

Second, with regard to downward mobility, different effects were found in inter- and intra-generational mobility. Moving downwardly to the manual class has some, but not too much, of a negative effect in the case of intergenerational mobility as a privileged background has positive effects on people's SWB level, which can be explained by the prospect of counter-mobility for those at early career stages as well as by their possession of various resources which may be used in helping offset the impacts of downward mobility. By contrast, downward mobility in one's career life seems quite detrimental to SWB. Manual positions entail many disadvantages and downward journey in one's career path entails extra stresses, frustrations and a pessimistic expectation for the future, all contributing to one's lower SWB.

Our results are different from Zang and De Graaf's (2016) in terms of mobility effects. The divergence might derive from three points: first, we used one year data from the 2006

China General Social Survey while they pooled three years data (2003, 2006, and 2008) together. (We would think that the pooling is problematic as the 2003 data only sampled urbanites who had distinctly different distributions on almost all key variables from those in subsequent years, and the 2008 data was based on a different question wording in the questionnaire.) Second, we based our analysis on substantive classes while Zang and De Graaf used relative ranks of social status, which could lead to a situation where respondents' absolute social statuses did not change or even improved but their relative ranks declined in a transitional society. Although categorised as downwardly mobile, these respondents might not have experienced notable changes in real life, which thus might have contributed to the unusual positive association between intragenerational downward mobility and happiness. Third, as shown above, we allowed for free estimation of weight parameters in each class, while a restrictive assumption was made in Zang and De Graaf's study in that an identical pattern of influence should apply to all movements between classes, which might also have led to deviation in the estimation of mobility effects.

The findings from our analysis challenge the view that moving into a different social position has no effect on people's SWB. While we have not been able to directly test the 'set-point' thesis of wellbeing, for which panel data including life events may provide more persuasive evidence, our analysis of the effects of mobility trajectory on SWB does allow us to have a time order as such trajectories would precede the current state of SWB. In this regard, our findings of higher origin and destination class's positive relationship with SWB would suggest a reasonable class grounding of wellbeing. As for the possible health selection effects, we did find that personal health had some explanatory power for SWB, but controlling for it did not change any of our conclusions, which is consistent with previous findings that health selection has a small impact in causing social mobility whereas social position has a more significant role in shaping health (Chandola et al, 2003). Thus, even

though we cannot rule out every possible confounding factor, our evidence on the social mobility effects should not be regarded as spurious. This leads us to contend that individuals' wellbeing is not predestined or unchanged, but can be shaped by changes in social positions. Economists such as Easterlin (2003) may well be correct that money is the most important determinant for SWB, yet, there is no denying that social positions do have a significant impact as we have found in this study. Sociologists have long found that social class is closely related to economic security, stability and prospect and has an important role to play on educational and occupational attainment (Goldthorpe, Llewellyn and Payne, 1987; Goldthorpe and McKnight, 2006), and our analysis here shows that class, even in a transitional society such as China, has an indisputable role on SWB.

With regard to the other hypotheses outlined earlier in the paper, our analysis provides partial support and suggests some revisions. As we may recall, our first hypothesis emphasised the impact of social position on people's wellbeing which is well substantiated. On the other hand, its scope needs to extend beyond individuals' current position and take their background position into consideration. Goldthorpe (2000) pointed out that the systematic inequality of resources available to families in one generation shapes the mobility strategies and outcomes in the next. Our study showed that people from salariat and intermediate origins are not only more likely to reach higher positions than those from manual families, they also enjoy protections even when they for one reason or another fail to follow in their parents' footsteps. Such protections may come in different forms but almost all are based on superior socio-economic resources ensuing from their parents' positions. In other words, wellbeing can become an entrenched advantage even in the absence of the intergenerational inheritance of social position per se.

Blau's acculturation theory (Hypothesis 2) sheds light on the impacts of both origin and current class positions, but the expectation of the mobile groups having intermediate level of

wellbeing only gained support for those experiencing intergenerationally downward mobility in our study, a pattern which, as discussed above, can be largely explained by the buffer effect of superior resources in the parental families. The acculturation theory does not apply to the upwardly mobile as their SWB were no different from the stable peers in the classes. We are not sure whether this asymmetric pattern is unique to China as we have not seen many studies demonstrating similar or different results in this regard in other countries. China is experiencing very rapid social change, and the identity and cultural norms of different social groups have not been fully established or consolidated yet. This means that the upwardly mobile can be fairly easily integrated into their new positions with the newly required social and economic resources bestowed on them by dint of the positions they occupy. In societies with a relatively stable social structure, origin class may exert a greater influence on the upwards' wellbeing. This suggests that it would be helpful to conduct a comparative study in societies to see whether our findings on China would still hold in a comparative manner.

With regard to Sorokin's theory (Hypothesis 3) that emphasised on the effect of mobility experience per se, our findings on intragenerational trajectory do lend some support. Yet Sorokin did not make a clear distinction between inter- and intra- generational mobility, and thus limited the power of his theory for predicting and explaining empirical findings.

In sum, our study has shown that people's wellbeing level is affected both by the position they hold and by the change in position they experience. While moving upward is beneficial, the impact of downward mobility depends: a lower position than one's parents' should not be regarded, nor is it perceived, as a 'fall into disgrace' for the young, nor perceived as particularly stressful for those with limited hope of counter-mobility as they still have much to rely on, whereas moving downwardly in one's own career may bring about more stress and tend to be more detrimental.

Our study also has limitations which consist mainly of three aspects. First, as detailed in the method and model section, the DRM framework cannot capture the potentially different features between the stayers and movers, which might lead to bias in the estimation of mobility effects. Second, as mentioned in the previous context, this study cannot directly test the equilibrium theory because of the lack of panel data. Apart from these two points, further analysis may also need to take into consideration the changing relative position of different classes, an aspect which is also important but has not been dealt with in the current study. For instance, in the current framework, a peasant whose father was also a peasant is labelled as 'stable manual class' in the intergenerational mobility, indicating no change in his/her relative position, but being a peasant in current China would be different from being a peasant in the previous generation, which was a normal situation then but indicates a rather different position now. In the current study, this group, together with the routine workers in urban settings, is set as the yardstick, to which other groups have been compared; future studies could use data from different years to examine whether the SWB of the current 'stable manual class' is different from the SWB of the 'stable manual class' in the previous periods, which would reveal the influence of social change in China.

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Highlights

- We examined the effects of inter- and intra- generational social mobility on Chinese people's subjective wellbeing using diagonal reference and regression models.
- In both inter- and intra- generational mobility trajectories, moving upward into a higher position tends to have beneficial consequences for people's wellbeing.
- In the case of intergenerational mobility, moving downward into the manual class does not have major consequences on people's wellbeing, which can be largely explained by the prospect of counter-mobility at early career stages and inherited resources from family origins.
- In the case of intragenerational mobility, moving downward into the manual class has significantly negative effects on wellbeing, which may result from both the disadvantages in the lower position and the negative psychological effects from the downward trajectory.

Table 1. Descriptive statistics for SWB, class positions and control variables

	Intergenerational Mobility		Intragenerational Mobility		Subsample Analysis	
	N	Mean (s.d) / Percentage	N	Mean (s.d) / Percentage	N	Mean (s.d) / Percentage
SWB						
Overall happiness	8381	3.4 (0.7)	8857	3.4 (0.7)	4905	3.4 (0.7)
Class position						
Origin class	8381		--		4905	
Salariat class		12.0%				6.3%
Intermediate class		8.7%				5.1%
Manual class		79.3%				88.6%
First class	--		8857		4905	
Salariat class				13.8%		1.0%
Intermediate class				15.6%		2.6%
Manual class				70.6%		96.4%
Current class	8381		8857		4905	
Salariat class		17.6%		18.0%		0.0%
Intermediate class		23.9%		24.2%		0.0%
Manual class		58.5%		57.8%		100.0%
Control variables						
Gender (Male=1)	8381	48.2%	8857	48.4%	4905	48.4%
Age/10	8381	4.3 (1.3)	8857	4.3 (1.3)	4905	4.4 (1.2)
Age/10-square	8381	19.9 (11.2)	8857	20.1 (11.3)	4905	20.7 (11.0)
Marital status	8381		8857		4905	
Married/cohabited		84.7%		84.4%		87.4%
Single		9.7%		9.9%		6.5%
Divorced/Widowed		5.6%		5.7%		6.0%
Hukou change (intergeneration)	8381		--		4905	
Stable rural		50.2%				67.6%
Rural to urban		17.5%				11.9%
Stable urban		32.3%				20.5%
Hukou change (intrageneration)	--		8857		4905	
Stable rural				48.5%		67.5%
Rural to urban				8.5%		6.3%
Stable urban				43.0%		26.1%
Explanatory variables						
Age35 (Yes=1)	--	--	--	--	4905	33.0%
Annual Income (in log form)	--	--	--	--	4905	7.8 (2.2)
CCP member (Yes=1)	--	--	--	--	4905	5.4%
Education level	--	--	--	--	4905	2.7 (1.1)
Social capital	--	--	--	--	4905	41.4 (9.4)
Future career expectation	--	--	--	--	4905	2.2 (0.5)
Sense of fairness	--	--	--	--	4905	2.4 (0.7)

Table 2. Mean score of overall SWB by origin (father's) class and current class. (N=8381; cell Ns shown in brackets)

Origin Class	Current Class		
	Salariat	Intermediate	Manual
Salariat	3.63	3.45	3.52
	(383)	(308)	(311)
Intermediate	3.61	3.49	3.42
	(184)	(299)	(249)
Manual	3.62	3.45	3.34
	(911)	(1397)	(4339)

Table 3. Mean score of overall SWB by first-job class and current class (N=8857; cell Ns shown in brackets)

First Class	Current Class		
	Salariat	Intermediate	Manual
Salariat	3.63	3.44	3.28
	(1025)	(139)	(58)
Intermediate	3.57	3.49	3.23
	(141)	(1105)	(137)
Manual	3.62	3.41	3.35
	(432)	(897)	(4923)

Table 4. DRM model estimates for the influence of inter- and intra- generational mobility on SWB

	Intergenerational Mobility				Intragenerational Mobility			
	Model 1	Model2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Estimated parameters								
w	0.235***				0.039		0.243	0.214
$w_{salariat}$		0.053	0.000	0.034		0.029		
$w_{intermediate}$		0.038	0.142	0.033		0.337*		
w_{manual}		0.630***	0.824*	0.649***		0.000		
β_{up}			-0.019				0.043	0.054
β_{down}			-0.056				-0.147**	-0.141**
u_{11}	3.673***	3.631***	3.634***	4.486***	3.626***	3.623***	3.627***	4.498***
u_{22}	3.472***	3.459***	3.492***	4.308***	3.456***	3.472***	3.465***	4.332***
u_{33}	3.348***	3.339***	3.339***	4.201***	3.350***	3.350***	3.354***	4.246***
Control variables								
Gender (female=ref)				-0.028*				-0.019
Age				-0.347***				-0.363***
Age-squared				0.034***				0.036***
Marital status (married=ref)								
Single				-0.300***				-0.309***
Divorced/widowed				-0.440***				-0.438***
Hukou change (stable rural=ref)								
Rural to urban				0.005				0.034
Stable urban				0.027				0.041**
Model fit								
RSS	4463.18	4457.27	4456.90	4319.65	4697.57	4696.42	4694.56	4546.35
df	4	6	8	13	4	6	6	13
p	--	0.003	0.691	0.000	--	0.316	0.049	0.000
N	8381	8381	8381	8381	8857	8857	8857	8857

Note: The estimated weight parameters are all for origin classes, with $w_{salariat}$, $w_{intermediate}$, and w_{manual} referring to origin effects on salariat, intermediate and manual destinations respectively. u_{11}, u_{22}, u_{33} are estimated mean values for the stable salariat, intermediate, and manual class members respectively. P under model fit refers to model comparison, namely, current vs preceding model. * p < .1, ** p < .05, *** p < .01. Full results with standard errors are available on request.

Table 5. OLS coefficients for inter- and intra- mobility effects on SWB among manual workers

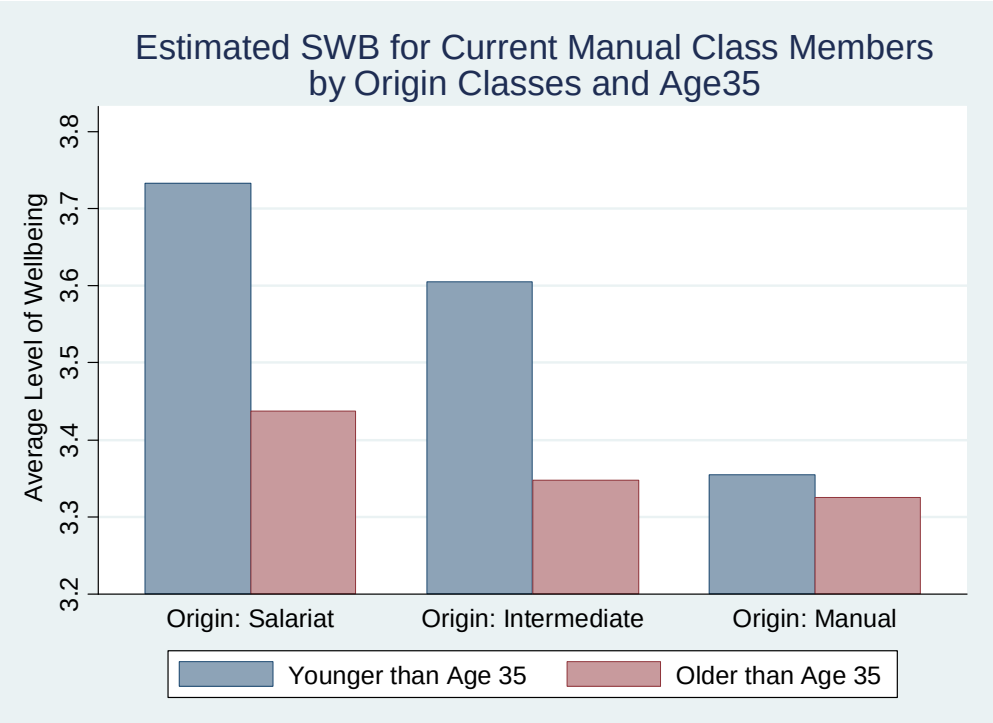
	Model 1 (Baseline)	Model2 (Control)	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
			(For inter-mobility)					(For intra-mobility)	
Class positions									
Origin class (Manual=ref)									
Salariat	0.192***	0.174***	0.113**	0.110**	0.101**	0.089*	0.075	0.075	0.080
Intermediate	0.103**	0.102**	0.023	0.017	0.020	0.007	-0.001	-0.003	0.004
First class (Manual=ref)									
Salariat	-0.150	-0.121	-0.136	-0.151	-0.158	-0.196*	-0.189*	-0.180*	-0.156
Intermediate	-0.130*	-0.145**	-0.149**	-0.156**	-0.161**	-0.175***	-0.174***	-0.175***	-0.148**
Explanatory variables									
Age35			0.030	0.026	0.025	0.026	0.026	0.026	0.020
Age35*Origin_salariat			0.266***	0.248**	0.256**	0.244**	0.246**	0.236**	0.165*
Age35*Origin_intermediate			0.228**	0.224**	0.216**	0.202**	0.212**	0.191*	0.143
Ln(income)				0.030***	0.030***	0.028***	0.027***	0.027***	0.015***
CCP member					0.156***	0.118**	0.105**	0.106**	0.125***
Education						0.061***	0.055***	0.049***	0.045***
Social capital							0.005***	0.004***	0.003**
Future career expectation								0.200***	0.155***
Sense of fairness									0.257***
Control variables									
Gender (female=ref)		-0.017	-0.018	-0.047**	-0.060***	-0.083***	-0.082***	-0.090***	-0.079***
Age		-0.230***	-0.154*	-0.174**	-0.173**	-0.169*	-0.161*	-0.125	-0.099
Age-squared		0.022***	0.016*	0.018**	0.018**	0.019**	0.018**	0.016*	0.011
Marital status (married=ref)									
Single		-0.295***	-0.286***	-0.298***	-0.292***	-0.300***	-0.294***	-0.294***	-0.293***
Divorced/Widowed		-0.440***	-0.436***	-0.444***	-0.437***	-0.429***	-0.422***	-0.430***	-0.424***
Hukou change (stable rural=ref)									
Rural to urban		0.026	0.022	0.013	0.007	-0.030	-0.044	-0.028	0.024
Stable urban		0.054*	0.056*	0.040	0.042	-0.027	-0.061*	-0.029	0.048
Cons	3.341***	3.924***	3.725***	3.551***	3.560***	3.388***	3.205***	2.726***	2.336***
Model fit									
R^2	0.53%	3.26%	3.52%	4.29%	4.50%	5.03%	5.35%	6.73%	11.63%
N	4905	4905	4905	4905	4905	4905	4905	4905	4905

Note: Full results with standard errors are available on request. * p < .1, ** p < .05, *** p < .01.

Table 6. OLS coefficients on inter- and intra- generational mobility trajectory effects on SWB

	Model 1	Model2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	(Baseline)	(Control)	(For inter-mobility)	(For intra-mobility)					
Mobility trajectory									
9.Sal - Sal - Man	0.385*	0.395*	0.514*	0.474	0.428	0.385	0.404	0.376	0.374
8.Sal - Int - Man	0.039	-0.022	-0.115	-0.105	-0.120	-0.157	-0.196	-0.236	-0.200
7.Sal - Man - Man	0.179***	0.163***	0.101*	0.098*	0.090*	0.079	0.065	0.070	0.075
6.Int - Sal - Man	-0.342	-0.389	-0.355	-0.393	-0.380	-0.439	-0.462	-0.421	-0.433
5.Int - Int - Man	0.008	0.031			-0.106				
	-0.135	-0.130	-0.131	-0.159	-0.141	-0.062			
4.Int - Man - Man	0.103**	0.099*	0.022	0.019	0.021	0.006	0.000	-0.004	0.000
3.Man-Sal- Man	-0.231*	-0.196	-0.224*	-0.231*	-0.227*	-0.255*	-0.247*	-0.212	-0.177
2.Man-Int-Man	-0.133*	-0.152*	-0.201*	-0.195*	-0.211*	-0.220**	-0.219**	-0.194*	-0.154
1.(*ref=Man-Man-Man)*									
Model fit									
R^2	0.60%	3.34%	3.64%	4.39%	4.60%	5.13%	5.46%	6.83%	11.71%
N	4905	4905	4905	4905	4905	4905	4905	4905	4905

Note: Coefficients for explanatory variables, control variables and constants are not shown as the results are similar to those in Table 5. Full results with all variables and standard errors are available on request. * p < .1, ** p < .05, *** p < .01



Note: Based on Model 3 of Table 5, with all other variables held at their mean values.

Fig. 1. Estimated level of SWB among manual workers

Notes

i Other authors have used 'self-reported happiness', 'life satisfaction' or other terms. Some researchers attempt to clarify the differences between subjective wellbeing, happiness, and life satisfaction (see Diener, 2000 for a review), but in this paper, we do not emphasise on the divergence between these concepts.

ii The two theories have similar conceptualisations in economic studies, namely, the 'habit formation' and 'interdependent preferences' theories (see Easterlin, 2003). In this paper, psychologists' terms are adopted as they are more widely used in SWB studies.

iii In social epidemiology, many studies have shown social class differences in health status (see Elo, 2009, for a good review), which is related to SWB yet has different implications. Recent work in this field shows an increasing interest in the effect of early life conditions on later health. Yet most previous studies in this field did not differentiate the effect from social positions and that from certain mobility experiences, which will be detailed in the following text.

iv The eight domains include 'work', 'family finance', 'family relationship', 'relationship with other people', 'personal health', 'housing condition', 'residential community', and 'the overall living conditions'. Data analysis on the overall SWB and life satisfaction scores had very similar results. Therefore, only results for the overall SWB are shown in the paper. Full results on life satisfaction are available upon request.

v *Hukou* is the household registration system in China which categorises the population into 'rural' and 'urban' sections with different rights and benefits. For a more detailed introduction, see Wu and Treiman (2004).

[vi] A sensitivity test was conducted by generating a dummy variable by which the differences between classes were rendered more visible. Similar results were found to what is reported in the following models.

[vii] Model 2b is preferred to Model 2a as the destination class plays a leading role. Additionally, using Model 2a did not improve the model fit. Furthermore, a less restricted model was fitted where the w value was allowed to vary across every cell in the mobility tables, but it proved to be no better than Model 2b.

[viii] We ran linear regression models and ordered logistic regression models for overall happiness and linear regression models for life satisfaction score, and found similar results from all these analyses. To give a straightforward and intuitive interpretation, we reported linear regression results for overall happiness. We checked the distribution of the residuals and conducted White's general test for the hypothesis of homoscedasticity. No significant violation was detected.