

**The Intergenerational Transmission of Socioeconomic Resources  
and Adult Self-Rated Health in China**

by

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## **Abstract**

Informed by Bourdieu and Passeron's theory of reproduction, I utilize cross-sectional survey data from the 2015 Chinese General Social Survey to investigate whether and how parents utilize their socioeconomic resources to facilitate the acquisition of socioeconomic resources by their children that in turn affect the health of the adult children. I find that parental education, parental type of work unit and self-rated childhood social class but not parental membership in the Chinese Communist Party (CCP) manifest independent associations with the self-rated health of survey respondents and that the intergenerational pathways from parental socioeconomic resources to self-rated health differ for men and women. Specifically, much of the association between parental socioeconomic resources and respondent self-rated health is explained by educational attainment among women and by household income among men. I also uncover a son-preference intergenerational transmission process for men born after 1970, near the beginning of significant market transitions in China. This study illuminates the importance of the intergenerational transmission of multiple forms of capital in fostering the good health of Chinese adults. In particular, these findings suggest that wealthy and well-educated Chinese parents tend to invest their capitals in the educational trajectories of their female children and in fostering the household incomes of their male children, both of which ultimately translate into good self-rated health for their adult children. This research not only documents the effect of parental resource on self-rated health but also reveals that the relationship between the state and individuals, which reflects the social changes that have characterized contemporary China, is an important factor when it comes to an understanding the nature of socioeconomic inequalities in health in this national context.

## **Lay Summary**

This study investigates whether and how parents utilize their socioeconomic resources to facilitate the acquisition of socioeconomic resources by their children that in turn affect the health of the adult children. I find that parental education, parental type of work unit and self-rated childhood social class manifest independent associations with the self-rated health of survey respondents. I also find that the intergenerational pathways from parental socioeconomic resources to self-rated health are gendered wherein much of the association is explained by educational attainment among women and by household income among men. This research not only documents the effect of parental resource on self-rated health but also reveals that social changes are important for understanding the nature of socioeconomic inequalities in health in contemporary China.

## **Preface**

This dissertation is original, unpublished, independent work by the author, Xueqing Zhang.

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*To my parents and Duoduo*

## **Introduction**

Strong associations between socioeconomic status (SES) – education, income, and occupation – and health have been well documented in the fundamental causes of health literature (Link & Phelan, 1995; Adler & Newman, 2002). In regard to processes linking SES to health, it has been proposed that education can affect health by shaping future occupational opportunities and earning potential as well as providing knowledge, information and resources related to promoting health status (Ross & Wu, 1995). Income can facilitate the purchase of health care services, better nutrition, better living environment and recreation, all of which can affect an individual's health (Kennedy et al., 1998). Employment can guarantee income, access to quality health care, and so forth (Gregorio et al., 1997). In addition, higher SES can provide people with stronger motivation and adequate resources to maintain a healthy lifestyle, which can also lead to health advantages (Wang & Geng, 2019).

There are two main perspectives on the presumably causal relationship between SES and health: social causation and health-selective mobility (Elstad & Krokstad, 2003). Consistent with the processes outlined above, the social causation perspective contends that the position of individuals in the social structure determines their health level; in other words, lower SES causes worse health status (Dahl, 1996). Health-selective mobility, by contrast, contends that health status is a screening mechanism for personal social mobility wherein people with better health are better able to obtain higher SES (West, 1991). Researchers in China who have uncovered associations between SES and health (Huang & Yin, 2013; Hong & Chen, 2017; Wang, 2012; Hong & Liu, 2019) have typically concluded that both processes are relevant for the health of Chinese people but that the explanatory power of social causation is stronger than that of health-selective mobility

(Wang, 2012). Consistent with these studies, the current study utilizes a social causation perspective to investigate socioeconomic health inequalities in China.

Rather than investigate the range of processes and mechanisms by which SES influences health in China, this study addresses a more distal causal process potentially germane to the manifestation of socioeconomic inequalities in health in China: whether parents utilize their socioeconomic resources to facilitate the acquisition of socioeconomic resources by their children that in turn affect the health of the adult children. This line of inquiry is informed by a long tradition of scholarship in sociology. For example, Bourdieu and Passeron (1977) argued that the educational system is founded upon relations of power and inequality despite the appearance of equal educational opportunity for everyone. They claimed that parents use their socioeconomic resources, including cultural capital (education credentials and socially valued habitus) and economic capital (income and wealth), to facilitate the acquisition of educational credentials and subsequently other socioeconomic resources (capitals) by their children. This process of intergenerational capital transmission plays a key role in social class reproduction, according to Bourdieu and Passeron (1977).

Previous health research in the South Korean context is consistent with this theory. There it has been argued that wealthy and well-educated South Korean parents tend to devote their socioeconomic resources to developing their children's math and linguistics skills in particular. These skills contribute to good performance in the standardized university entrance exams, access to prestigious universities, success in the labour and marriage markets and, ultimately, good health for their adult children (Veenstra & Jeong, 2016). Similar processes may be at work in China as well. As in South Korea, the standardized university entrance exams in China are highly competitive. Indeed, Chinese parents treat the university entrance exams as one of the most

important issues in their children's lives. However, due to the Cultural Revolution from 1966 to 1976, this has likely only been a factor in the intergenerational transmission of socioeconomic resources from 1977 onwards when standardized university entrance exams were reintroduced to Chinese society.

In light of the above the current study pursues the following research questions: 1) Are parental socioeconomic resources associated with their adult children's health? 2) If yes, do personal socioeconomic resources explain these associations? 3) And lastly, are these intergenerational processes stratified by gender (women versus men), *hukou* status (urban versus rural) and/or age group (aged 25 to 44 versus aged 45 to 65)?

This study contributes to the existing literature in four ways. First, I use the type of work unit (*danwei*) and membership in the Chinese Communist Party (CCP) as key measures of socioeconomic resources in the Chinese context. The market transformation debates in China contain two theoretical perspectives: the market transition and persistence of power theories, which have influenced the study of (post-) socialist societies (Fu et al., 2015). Market transition theory argues that the market transition in China would gradually benefit producers rather than redistributors (e.g., cadres). (Nee, 1989). However, this theory has been questioned by the persistence of power theory and succeeding studies (Bian & Logan, 1996; Fu et al., 2015). The political power of China remains dominant over resources, which secures privilege in the marketplace among cadres, either as agents of a central authority or administrators of local economies (Bian & Logan, 1996; Fu et al., 2015). Therefore, institutional power needs to be considered when measuring socioeconomic resources in the Chinese context. After the founding of the People's Republic in 1949, the CCP governed most workplaces under the work unit (*danwei*) system, a state production unit administrative system (Schurmann, 1968). A work unit facilitated

the centrally planned economy by adopting an “all-encompassing” role for its employees (Walder, 1986), which is not limited to labour distribution and production but also to the allocation of benefits, such as public housing, medical care, childcare, sense of belonging, etc. (Bray, 2005; Fu & George, 2015). The CCP is the ruling party and the largest political organization in China, possessing significant power, both socially and politically (Xue & Cheng, 2017). CCP membership reflects the connection to PRC’s authority power and brings both economic benefits (Appleton et al., 2009) and educational benefits (Yan, 2019). I contend that these political dimensions need to be taken into consideration when conceptualizing socioeconomic resources in the context of China (Korp, 2010; Hammarström et al., 2014). Given this background, I hypothesize that parental resources (education, type of work unit, self-rated childhood social class) are associated with adult children’s self-rated health, and household income and education level mediate the effects of parental resources on self-rated health.

Second, I adopt a gendered perspective on processes linking parental socioeconomic resources to adult health by stratifying my survey sample by gender from the outset. Being a son or a daughter triggers different intergenerational transmission processes in children’s socialization, which strengthens and reproduces gender role stereotypes and gender inequality (Eccles et al., 1990). Son-preferred parental investments and spending in China have been extensively documented, reproducing inequalities in education, economic status and health (Kornrich and Furstenburg, 2013). In so doing, I attempt to discern whether parents invest their socioeconomic resources differently in their sons and daughters and whether, in turn, their sons and daughters are eventually equipped with different sets of resources that have different effects on their health. Given this background, I hypothesize that the intergenerational resource transmission path differs for men and women, which may suggest boy preference in general.

Third, I additionally consider how processes linking parental socioeconomic resources to adult health may differ by *hukou* status. *Hukou* status (urban or rural) is a household registration system in China that was first implemented in 1958. The *hukou* system limits opportunity for rural people in almost every sphere in social life (Song & Smith, 2019), including education (Li et al., 2010), job opportunities (Wu & Treiman, 2007), housing (Wu & Treiman, 2004) and health insurance (Liu, 2005). Although in recent years the system has somewhat weakened, the legacy of this system still has a profound influence on social life in China (Guang et al., 2010). Also rural, low-income parents tend to have a higher level of son preferences as they expect greater economic returns from sons than daughters (Hannum, Kong & Zhang 2009). In view of this, I hypothesize that parental resource has the weakest association with the SRH of rural women, comparing to rural men and urban men and women.

Fourth, given the constant institutional transformations the People's Republic of China has endured since its foundation in 1949, I additionally stratify my sample by age group, distinguishing between survey respondents aged 25 to 44 from those aged 45 to 65. Respondents aged 45 in my survey sample were born in 1970, the beginning of what is considered to be a watershed in the social transformation of contemporary China. This distinction allows me to obtain insight into the relevance of societal changes forthcoming from the Cultural Revolution on the intergenerational production of health in China. In view of this background, I hypothesize that the self-rated health of respondents born after 1970 have weaker associations with parental resources compared to older respondents, and within younger respondents, men tend to inherit more parental resources than women.

## Methods

This study utilized the Chinese General Social Survey 2015 (CGSS 2015) dataset, a cross-sectional survey, with the individual as the unit of analysis. The Chinese General Social Survey (CGSS) began in 2003 and is the earliest national, comprehensive and continuous academic survey project in China. The CGSS comprehensively collects data from multiple levels of society: community, family, and individual. CGSS data is currently the most important data source for studying Chinese society and is widely used in research, teaching, and government decision-making.

The 2015 CGSS used a multistage stratified random sampling strategy. The survey utilized 120 counties (districts) across the country, plus the five major cities of Beijing, Shanghai, Tianjin, Guangzhou and Shenzhen, as the primary sampling units. In each of the counties (districts), four neighbourhood committees or village committees were randomly selected; in each neighbourhood committee or village committee, 25 families were sampled; and in each of the sampled families, one person was randomly selected to complete the questionnaire. In each of the five major cities of Beijing, Shanghai, Tianjin, Guangzhou and Shenzhen, a total of 80 neighbourhood committees were randomly selected; in each neighbourhood committee, 25 families were surveyed; and in each of the sampled families, one person was randomly selected to complete the questionnaire. The resultant sample was comprised of 12,000 individuals. Of these, 10,968 questionnaires were successfully completed, producing a response rate of 91.4%.

In this study, I focused on respondents aged 25 to 65 years. I adopt a lower boundary of 25 years of age (i.e., born before 1990) in order to ensure that most respondents would have completed their educational training by then. I adopt an upper boundary of 65 years of age (i.e., born after 1950) in order to ensure that the respondents are of working age and born after the foundation of

the People's Republic in 1949. Father's type of work unit, father's education and annual household income had the highest amounts of missing data in this subsample (see Table 1). I utilized a listwise deletion approach applied to the variables utilized in this study, which lead to discarding 23.7% of the cases. The final working sample was therefore comprised of 3,067 women and 2,731 men.

I measured parental socioeconomic resources with father's educational attainment, father's CCP membership, father's type of work unit (*danwei*) and self-rated childhood social class. Father's educational attainment distinguished between (i) non-educated, (ii) elementary school and (iii) junior high school or higher. Although in contemporary China compulsory education ranges from elementary school to junior high school, this system came into force only in 1986. Given that the average age of the selected sample is 47 (birth year 1968, see Table 1), I distinguish between junior high school and elementary school when coding father's education level. Father's CCP membership distinguished between non-CCP members and CCP members (consisting of formal members, democratic party members and Communist Youth League members). Respondents were also asked "What type of *danwei* did your father work in when you were 14 years old?" Father's *danwei* distinguishes between (i) state-sector employment (consisting of CCP and government organizations, public institutions and military), (ii) enterprises, (iii) social groups, village/neighbourhood committees (iv) no *danwei*/self-employment and (v) other. Lastly, respondents were asked, "Which social class do you identify your family belonged to when you were 14 years old?" Response categories ranged from 1 (the lowest) to 10 (the highest). I collapsed this ten-part variable into three categories, distinguishing between lower class (values 1 to 2 on the original variable), middle class (values 3 to 4) and higher class (values 5 to 10).



I measured personal socioeconomic resources with educational attainment, CCP membership and household income. Personal educational attainment distinguished between (i) non-educated or elementary school, (ii) junior high school, (iii) technical or senior high school and (iv) junior college, bachelor's degree or higher. CCP membership distinguished between non-CCP members and CCP members (again consisting of formal members and democratic party members<sup>1</sup>). Annual household income was measured in won. I calculated logged equivalized annual household income by dividing annual household income by the square root of household size and then taking the log base 10 of this value.

I utilized self-rated health (SRH) as the dependent variable for these analyses. SRH is considered to be an effective predictor of mortality and other functional limitations and has been used in many developed and developing countries (Lowry & Xie, 2009). Respondents were asked, "How would you evaluate your physical health condition?" Possible responses were (i) very unhealthy, (ii) unhealthy, (iii) neutral, (iv) healthy and (v) very healthy. I dichotomized this variable for use in multivariate binary logistic regression models. There has been discussion among scholars regarding whether "neutral" should be classified as "healthy" or "unhealthy" (Li and Xia, 2014; Jiao 2014; Li & Zhu, 2008). I investigated the utility of both coding strategies but eventually chose to apply the strategy comparing very healthy, healthy or neutral to unhealthy or very unhealthy as this strategy provided stronger associations between indicators of parental and

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<sup>1</sup> The eight democratic parties in China are very different from the notion of "democratic party" in the western context. In practice, only the CCP holds effective power at the national level. Members of democratic parties are vetted by the CCP, who are mainly cultural, business or religious elites or celebrities.

personal socioeconomic resources and SRH. All of the variables utilized in this study are summarized in Table 1.

I created a series of binary logistic regression models on dichotomized SRH to predict unhealthy or very unhealthy self-rated health separately for men and women. The first model included the four parental socioeconomic resources variables and the control variables age and marital status. The second model added the three personal socioeconomic resources variables to the first model. Where appropriate, I applied Wald tests (Stata command *testparm*) to determine whether a categorical variable made a statistically significant contribution to a model. Where appropriate, I also applied the KHB decomposition technique via the Stata command *khb* (Kohler, Karlson, & Holm, 2011) to investigate the degree to which personal socioeconomic resources potentially mediated the association between parental socioeconomic resources and SRH. I additionally executed all of the abovementioned series of models separately for younger men and women (aged 25 to 44) and older men and women (aged 45 to 65). Finally, I additionally executed the first series of models separately for rural women, rural men, urban women and urban men. In all of the models, I applied the personal weight variable to account for the complex sampling design of the CGSS.

**Table 1** Characteristics of the working sample (un-weighted data)

Variable	Categories	Total (n=7600)		Female (n=4077)		Male (n=3523)	
		n	%	n	%	n	%
Father's education	Non-educated	2560	33.7	1404	34.4	1156	32.9
	Elementary school	2316	30.5	1203	29.5	1113	31.6
	Junior high school, technical or senior high, junior college, bachelor degree or higher	2208	29.1	1171	28.7	1037	29.4
	Missing	516	6.8	299	7.3	217	6.2
Father's CCP membership	non CCP	6475	85.2	3483	85.4	2992	84.9
	CCP member	989	13.0	510	12.5	479	13.6
	Missing	136	1.8	84	2.1	52	1.5
Self-rated childhood social class	Lower class	3018	39.7	1564	38.4	1454	41.3
	Middle class	2627	34.6	1423	34.9	1204	34.2
	Higher class	1838	24.2	1029	25.2	809	23.0
	Missing	117	1.5	61	1.5	56	1.6
Father's type of work unit (Danwei)	State-sector employment	736	9.7	408	10.0	328	9.3
	Enterprises	1066	14.0	535	13.1	531	15.1
	Social groups, village/neighbourhood committees	145	1.9	73	1.8	72	2.0
	No Danwei/ self-employment	4798	63.1	2603	63.9	2195	62.3
	Missing	855	11.3	458	11.2	397	11.3
	Non-educated or elementary school	2195	28.9	1444	35.4	751	21.3
Education level	Junior high school	2425	31.9	1209	29.7	1216	34.5
	Technical or senior high school	1735	22.8	800	19.6	935	26.5
	Junior college, bachelor degree or higher	1225	16.1	614	15.1	611	17.3
	Missing	20	0.3	10	0.3	10	0.3
CCP membership	Non CCP	6880	90.5	3832	94.0	3048	86.5
	CCP member	686	9.0	226	5.5	460	13.1
	Missing	34	0.5	19	0.5	15	0.4
Hukou status	Rural	4892	64.4	2660	65.2	2232	63.4
	Urban	2700	35.5	1411	34.6	1289	36.6
	Missing	8	0.1	6	0.1	2	0.1
Marital status	Single	781	10.3	280	6.9	501	14.2
	Married	6355	83.6	3509	86.1	2846	80.8
	Separated/divorced	225	3.0	116	2.9	109	3.1
	Bereaved	239	3.1	172	4.2	67	1.9

Variable	Categories	Total (n=7600)		Female (n=4077)		Male (n=3523)	
		n	%	n	%	n	%
Self-rated health	Missing	0	0.0	0	0.0	0	0.0
	Healthy	6583	86.6	3475	85.2	3108	88.2
	Unhealthy	1012	13.3	601	14.7	411	11.7
	Missing	5	0.1	1	0.0	4	0.1
		Mean	Std	Mean	Std	Mean	Std
Age		47.01	11.39	47.05	11.21	46.96	11.59
	Missing	0	0.0%	0	0.0%	0	0.0%
Household size		3.06	1.41	3.09	1.39	3.02	1.42
	Missing	25	0.3%	10	0.3%	15	0.4%
Equivalent income		48116.1	198139.	43167.1	157634.	53724.2	235673.
	Missing	9	1	4	1	2	2
Log equivalized income		631	8.3%	375	9.2%	256	7.3%
	Missing	10.15	1.05	10.11	1.02	10.19	1.07
	Missing	631	8.3%	375	9.2%	256	7.3%

## Results

### Stratified by gender

Model 1 in Tables 2 and 3 show the coefficients for parental socioeconomic resources on SRH for men and women, respectively. The ORs comparing non-educated fathers to fathers with junior high school or higher were marginally significant (OR=1.546 and 95% CI=0.979-2.444) for men but not significant for women. The odds ratios comparing CCP member fathers to non-CCP member fathers were not significantly different from one for either men or women. The ORs comparing fathers who work in state-sector employment, enterprises, social groups, and other types of work unit to fathers who have no work unit or were self-employed were not significantly different from one for men. However, the odds ratio comparing father's type work unit as enterprises to no work unit/self-employed was strong at 0.476 (95% CI = 0.307 - 0.738) among women. Lastly, the ORs comparing lower self-rated childhood social class to higher self-rated childhood social class were modest at 1.826 (95% CI=1.242-2.684) for men and 1.572 (95% CI = 1.139 - 2.169) for women. These results indicate that, for men, parental education (Wald  $p < 0.1$ ) and self-rated childhood social class (Wald  $p < 0.0001$ ), but not father's work unit type or father's CCP membership (Wald  $p > 0.05$ ), are independent correlates of SRH, controlling for age and marital status. For women, however, father's type of work unit (Wald  $p < 0.01$ ) and self-rated childhood social class (Wald  $p < 0.0001$ ), but not parental education or father's CCP membership (Wald  $p > 0.05$ ), are independent correlates of SRH, controlling for age and marital status.

Model 2 in Table 2 and Table 3 adds indicators of personal socioeconomic status to Model 1. The declines in the magnitudes of the odds ratios for parental education from Model 1 to Model 2 in Tables 2 and 3 (from 1.546 to 1.174 among men) indicate that personal socioeconomic status

explained much of the modest association between parental educational attainment and SRH among men. The KHB decomposition for men indicates that 66.5% of the comparison between least educated and most educated fathers was explained by the household income (68.4% of the decomposition) and educational attainment (29.2% of the decomposition) of the respondents. These results indicate that household income played an important role in mediating the effect of father's education on SRH among men.

The declines in effect size for self-rated childhood social class from Model 1 to Model 2 in Tables 1 and 2 (from 1.826 to 1.546 among men and from 1.572 to 1.274 among women) indicate that personal socioeconomic status explained some of the modest associations between self-rated childhood social class and SRH. The KHB decomposition for men indicates that 31.6% of the comparison between the lower class and higher class categories was explained by the household income (77.9% of the decomposition) and educational attainment (20.9% of the decomposition) of the respondents. The KHB decomposition for women indicates that 46.1% of the comparison between the lower class and the higher class categories was explained by the household income (33.9% of the decomposition) and educational attainment (64.7% of the decomposition) of the respondents. These results indicate that self-rated childhood social class was associated with SRH over and above the socioeconomic resources held by the respondents themselves for both men and women. Also, household income played a more important role in mediating the effect of self-rated childhood social class on SRH among men than among women, and educational attainment played a more important role in mediating the effect of self-rated childhood social class on SRH among women than among men.

The declines in the magnitudes of the odds ratios for father's type of work unit from Model 1 to Model 2 in Tables 2 and 3 (from 0.476 to 0.784 among women) indicate that personal

socioeconomic status explained much of the association between father's type of work unit and SRH among women. The KHB decomposition indicates that 21.8% of the comparison between father who worked in enterprises and no-*danwei* or self-employed fathers was explained by the household incomes (22.0% of the decomposition) and educational attainment (76.1% of the decomposition) of the respondents. These results indicate that father's type of work unit was associated with SRH over and above the socioeconomic resources held by the respondents themselves for women, and educational attainment played a more important role in mediating the effect of father's type of work unit on SRH among women.

The final set of results forthcoming from Tables 2 and 3 pertain to associations between indicators of personal socioeconomic status and SRH while controlling for parental socioeconomic resources, age and marital status. Notably, personal educational attainment manifested a strong association with SRH among women but not among men: the OR comparing respondents with elementary school or less to respondents with a technical college diploma or higher were 2.671 (95% CI = 1.394 - 5.117) among women. In addition, log equivalized household income manifested a stronger association with SRH among men (OR = 0.610 and 95% CI = 0.517 - 0.719) than among women (OR = 0.826 and 95% CI = 0.725-0.942). CCP membership was not significantly associated with SRH for men or women. It appears that, for men, household income is an important correlate of SRH above and beyond parental socioeconomic status, whereas, for women, household income and (especially) educational attainment are important correlates of SRH above and beyond parental socioeconomic status.

**Table 2** Binary logistic regression models on unhealthy or very unhealthy self-rated health among men (n = 2731; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.546	0.979-2.440	1.174	0.734-1.876
	Elementary school	1.142	0.742-1.756	0.994	0.643-1.537
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.232	0.815-1.861	1.230	0.807-1.871
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	1.234	0.738-2.061	1.597	0.945-2.698
	Enterprises	0.738	0.461-1.181	1.039	0.643-1.680
	Social groups, village/neighbourhood committees	1.230	0.566-2.671	1.151	0.534-2.482
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.826**	1.242-2.684	1.545*	1.044-2.288
	Middle class	0.861	0.560-1.324	0.834	0.538-1.291
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			1.617	0.812-3.221
	Junior high school			1.568	0.830-2.961
	Senior high school			1.345	0.712-2.542
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.921	0.568-1.494
	Non CCP (reference)			1.000	
Log equivalized income	...			0.610****	0.517-0.719

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001



**Table 3** Binary logistic regression models on unhealthy or very unhealthy self-rated health among women (n = 3067; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.316	0.883-1.963	0.931	0.614-1.412
	Elementary school	0.999	0.685-1.457	0.876	0.593-1.293
	Junior high school or higher (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	1.054	0.628-1.769	1.411	0.836-2.342
	Enterprises	0.476***	0.307-0.738	0.784	0.496-1.240
	Social groups, village/neighbourhood committees	0.756	0.331-1.074	0.765	0.331-1.770
	No Danwei/self-employment (reference)	1.000		1.000	
Father's CCP membership	CCP member	0.782	0.485-1.260	0.832	0.515-1.343
	Non CCP (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.572**	1.139-2.169	1.274	0.914-1.775
	Middle class	0.790	0.550-1.134	0.733	0.506-1.060
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			2.671**	1.394-5.117
	Junior high school			1.487	0.801-2.761
	Senior high school			0.908	0.482-1.710
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.921	0.423-2.005
	Non CCP (reference)			1.000	
Log equivalized income	...			0.826**	0.725-0.942

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

### **Stratified by gender and age**

Model 1 in Tables 4 and 5 indicate that father's educational attainment was not significantly associated with SRH among men aged 25 to 44 (Wald  $p > 0.05$ ) nor men aged 45 to 65 (Wald  $p > 0.05$ ). Father's CCP membership was not significantly associated with SRH in either sample. Father's type of work unit was significantly associated with SRH among men aged 25 to 44 (Wald  $p < 0.05$ ) but not men aged 45 to 65 (Wald  $p > 0.05$ ). The former association was actually strengthened (odds ratios from 3.440 to 4.289) upon controlling for indicators of personal socioeconomic status. Self-rated childhood social class was significantly associated with SRH among men aged 25 to 44 (Wald  $p < 0.01$ ) and men aged 45 to 65 (Wald  $p < 0.001$ ). These associations were also attenuated upon controlling for indicators of personal socioeconomic status. The KHB decomposition for these associations indicate that 39.0% of the comparison between the lower class and higher class categories was explained by household income (56.6% of the decomposition), educational attainment (17.3% of the decomposition) and CCP membership (26.1% of the decomposition) among the men aged 25 to 44 and that 35.7% of the comparison between the lower class and higher class categories was explained by the household incomes (77.1% of the decomposition) and educational attainment (25.1% of the decomposition) among the men aged 45 to 65. These results indicate that for both age groups of men, self-rated childhood social class but not parental education nor father's CCP membership was an independent correlate of SRH, controlling for age and marital status. Also, household income played a more important role in mediating the effect of self-rated childhood social class on SRH among men aged 45 to 65 than

among men aged 25 to 44.

Model 1 in Tables 6 and 7 indicate that father's educational attainment was neither significantly associated with SRH among women aged 25 to 44 (Wald  $p > 0.05$ ) nor women aged 45 to 65 (Wald  $p > 0.05$ ). As was the case with men, father's CCP membership was not significantly associated with SRH in either sample. Father's type of work unit was significantly associated with SRH among women aged 45 to 65 (Wald  $p < 0.05$ ) but not among women aged 25 to 44 (Wald  $p > 0.05$ ). The KHB decomposition for this association indicates that 24.0% of the comparison between the fathers worked in enterprises and father with no work unit was explained by the household incomes (22.1% of the decomposition) and educational attainment (73.6% of the decomposition) of the women aged 45 to 65. Self-rated childhood social class was significantly associated with SRH among women aged 45 to 65 (Wald  $p < 0.0001$ ) but not among women aged 25 to 44 (Wald  $p > 0.05$ ). The former association was attenuated upon controlling for indicators of personal socioeconomic status. The KHB decomposition for this association indicates that 42.2% of the comparison between the lower class and higher class categories was explained by the household incomes (29.4% of the decomposition) and educational attainment (63.8% of the decomposition) of the respondents. These results indicate that for women aged 45 to 65 both parental education and self-rated childhood social class, but not father's CCP membership, were independent correlates of SRH, controlling for age and marital status. Also, household income and (especially) educational attainment were important correlates of SRH above and beyond parental education but not self-rated childhood social class for the older women. Parental socioeconomic resources were not correlates of SRH for women aged 25 to 44, although their household incomes

and (especially) educational attainment (OR = 3.418 with 95% CI = 1.244 – 9.390) were strong correlates of SRH.

The final set of results forthcoming from Tables 4 – 7 pertain to associations between indicators of personal socioeconomic resources and SRH while controlling for parental socioeconomic resources, age and marital status. Educational attainment was strongly associated with SRH among men aged 45 to 65 (OR = 2.797 with 95% CI = 0.951-8.225), women aged 25 to 44 (OR = 3.418 with 95% CI = 1.244 - 9.390) and women aged 45 to 65 (OR = 2.654\* with 95%CI = 1.028-6.856) but not among men aged 25 to 44. Interestingly, CCP membership *was* significantly associated with SRH among men aged 25 to 44 (OR = 0.207 with 95% CI =0.046 – 0.921) but not other groups of samples. Lastly, log equivalized household income was significantly associated with SRH among men aged 45 to 65 (OR = 0.597 with 95% CI =0.503 - 0.708), women aged 25 to 44 (OR = 0.596 with 95% CI = 0.452 – 0.786) and women aged 45 to 65 (OR = 0.865 with 95% CI = 0.750 - 0.997) but not among men aged 25 to 44. These results indicate that for men aged 25 to 44, CCP membership was an important correlate of SRH above and beyond parental socioeconomic resources, whereas, for men aged 45 to 65 and women of both age groups, household income and (especially) educational attainment were important correlates of SRH above and beyond parental socioeconomic resources.

**Table 4** Binary logistic regression models on unhealthy or very unhealthy self-rated health men aged between 25 and 44 (n = 1092; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.192	0.576-3.129	0.699	0.244-2.008
	Elementary school	1.485	0.777-3.270	1.145	0.487-2.688
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	0.919	0.482-2.978	1.031	0.409-2.599
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	3.440*	1.352-9.425	4.289**	1.578-11.660
	Enterprises	1.133	0.358-3.652	1.461	0.450-4.745
	Social groups, village/neighbourhood committees	2.639	0.419-17.058	3.114	0.441-21.994
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	2.471*	0.819-3.611	1.976	0.861-4.537
	Middle class	0.723	0.209-1.270	0.717	0.280-1.836
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			1.831	0.598-5.605
	Junior high school			0.978	0.360-2.653
	Senior high school			0.618	0.199-1.917
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.207*	0.046-0.927
	Non CCP (reference)			1.000	
Log equivalized income	...			0.668	0.427-1.045

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

**Table 5** Binary logistic regression models on unhealthy or very unhealthy self-rated health men aged between 45 and 65 (n = 1639; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.366	1.024-2.597	1.104	0.636-1.916
	Elementary school	0.992	0.795-2.098	0.901	0.523-1.552
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.328	0.765-1.849	1.299	0.807-2.094
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	0.893	0.492-1.620	1.129	0.611-2.086
	Enterprises	0.680	0.407-1.135	0.927	0.550-1.563
	Social groups, village/neighbourhood committees	1.025	0.436-2.409	0.922	0.402-2.111
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.736*	1.113-2.707	1.462	0.925-2.310
	Middle class	0.910	0.601-1.531	0.875	0.527-1.454
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			2.797*	0.951-8.225
	Junior high school			2.951*	1.048-8.307
	Senior high school			2.728*	0.961-7.744
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			1.158	0.700-1.916
	Non CCP (reference)			1.000	
Log equivalized income	...			0.597****	0.503-0.708

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

**Table 6** Binary logistic regression models on unhealthy or very unhealthy self-rated health women aged between 25 and 44 (n = 1207; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.747	0.786-3.880	0.878	0.396-1.949
	Elementary school	1.027	0.505-2.091	0.742	0.353-1.559
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.450	0.516-4.081	1.501	0.516-4.364
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	1.386	0.492-3.906	1.695	0.580-4.952
	Enterprises	0.654	0.244-1.748	0.960	0.338-2.725
	Social groups, village/neighbourhood committees	1.021	0.184-5.661	1.118	0.175-7.134
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.609	0.868-2.986	1.239	0.661-2.322
	Middle class	0.857	0.434-1.694	0.839	0.415-1.699
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			3.418*	1.244-9.390
	Junior high school			1.582	0.568-4.408
	Senior high school			0.891	0.312-2.542
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			2.066	0.544-7.845
	Non CCP (reference)			1.000	
Log equivalized income	...			0.596****	0.452-0.786

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

**Table 7** Binary logistic regression models on unhealthy or very unhealthy self-rated health for women aged 45 to 65 (n = 1841; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.225	0.764-1.965	0.916	0.563-1.490
	Elementary school	0.995	0.628-1.577	0.890	0.557-1.423
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	0.681	0.399-1.161	0.727	0.426-1.243
	Non CCP member (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	0.941	0.520-1.702	1.269	0.691-2.330
	Enterprises	0.450***	0.276-0.732	0.718	0.426-1.210
	Social groups, village/neighbourhood committees	0.732	0.302-1.777	0.741	0.302-1.819
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.606*	1.108-2.328	1.319	0.900-1.933
	Middle class	0.798	0.524-1.215	0.732	0.476-1.124
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			2.654*	1.028-6.856
	Junior high school			1.603	0.634-4.053
	Senior high school			1.005	0.406-2.489
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.706	0.279-1.789
	Non CCP (reference)			1.000	
Log equivalized income	...			0.865*	0.750-0.997

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001



### **Stratified by gender and hukou status**

Model 1 in Tables 8 and 9 indicate that father's educational attainment was marginally significantly associated with SRH among men with rural *hukou* status (Wald  $p = 0.06$ ) but not for urban men (Wald  $p > 0.05$ ). The KHB decomposition for the former association indicates that 27.0% of the comparison between the poorest and best-educated fathers was explained by the household incomes (82.6% of the decomposition) and educational attainment (17.6% of the decomposition) of the rural men. Self-rated childhood social class was significantly associated with SRH among men with rural *hukou* status (Wald  $p < 0.01$ ) and men with urban *hukou* status (Wald  $p < 0.001$ ). These associations were also attenuated upon controlling for indicators of personal socioeconomic resources. The KHB decomposition for these associations indicates that 22.4% of the comparison between the lower class and higher class categories was explained by household income (90.8% of the decomposition) and educational attainment (9.3% of the decomposition) among rural men and that 35.4% of the comparison between the lower class and higher class categories was explained by the household incomes (71.1% of the decomposition) and educational attainment (27.2% of the decomposition) among the men with urban *hukou* status. Father's type of work unit and CCP membership were not significantly associated with SRH in either the rural sample or the urban sample (Wald  $p > 0.05$ ). These results indicate that for rural men, both parental education and self-rated childhood social class were independent correlates for SRH, but for urban men only self-rated childhood social class but not parental education nor father's CCP membership was an independent correlate of SRH, controlling for age and marital status. Also, household income

played a more important role in mediating the effect of self-rated childhood social class on SRH among rural and urban men.

Model 1 in Tables 10 and 11 indicate that father's educational attainment was significantly associated with SRH among urban women (Wald  $p < 0.05$ ) but not among rural women (Wald  $p > 0.05$ ). The KHB decomposition for this association indicates that 26.2% of the comparison between the poorest and best-educated fathers was explained by the household incomes (75.2% of the decomposition) and educational attainment (17.3% of the decomposition) of women with urban *hukou* status. Self-rated childhood social class was significantly associated with SRH among rural women (Wald  $p < 0.0001$ ) but not among urban women (Wald  $p > 0.05$ ). The association among rural women was attenuated upon controlling for indicators of personal socioeconomic status. The KHB decomposition for this association indicates that 39.7% of the comparison between the lower class and higher class categories was explained by the household incomes (20.7% of the decomposition) and educational attainment (82.5% of the decomposition) of the respondents. Father's type of work unit was significantly associated with SRH among urban women (Wald  $p < 0.05$ ) but not among rural women (Wald  $p > 0.05$ ). As was the case with men, father's CCP membership was not significantly associated with SRH in either sample. These results indicate that for women with rural *hukou* status, it is self-rated childhood social class but not parental education, father's type of work unit or father's CCP membership, that were independent correlates of SRH, controlling for age and marital status. Also, educational attainment played a major important role in mediating the effect of self-rated childhood social class on SRH among rural women. For women of urban *hukou* status, however, parental education and father's type of work

unit, but not self-rated childhood social class or father's CCP membership, were independent correlates of SRH, controlling for age and marital status. Also, household income played a major important role in mediating the effect of parental education and father's type of work unit on SRH among urban women.

Controlling for parental socioeconomic resources, age and marital status, Tables 8 – 11 provide a final set of results about associations between indicators of personal socioeconomic resources and SRH. Educational attainment was strongly associated with SRH among rural women but not among urban women, rural men nor urban men. CCP membership was not significantly associated with SRH in any of the four samples. Lastly, log equivalized household income was significantly associated with SRH among rural men (OR = 0.616 with 95% CI = 0.521-0.729), urban men (OR = 0.591 with 95% CI = 0.383-0.912) and urban women (OR = 0.703 with 95% CI = 0.542-0.913) but not rural women. These results indicate that for both rural and urban men and urban women, household income was an important correlate of SRH above and beyond parental socioeconomic resources, whereas for rural women, educational attainment was an especially important correlate of SRH above and beyond parental socioeconomic resources.

**Table 8** Binary logistic regression models on unhealthy or very unhealthy self-rated health rural men (n = 1781; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	2.040*	1.082-3.845	1.729	0.897-3.331
	Elementary school	1.522	0.833-2.783	1.389	0.754-2.557
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.271	0.777-2.078	1.283	0.794-2.075
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	2.136*	1.090-4.187	2.217*	1.117-4.398
	Enterprises	1.638	0.615-4.360	2.115	0.801-5.580
	Social groups, village/neighbourhood committees	0.956	0.380-2.400	0.927	0.378-2.272
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.925*	1.158-3.200	1.676*	1.003-2.802
	Middle class	1.025	0.582-1.803	0.972	0.549-1.721
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			0.982	0.357-2.701
	Junior high school			0.905	0.340-2.406
	Senior high school			0.698	0.254-1.916
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			1.006	0.521-1.944
	Non CCP (reference)			1.000	
Log equivalized income	...			0.616*****	0.521-0.729

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\*\* p<0.0001

**Table 9** Binary logistic regression models on unhealthy or very unhealthy self-rated health urban men (n = 950; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	1.033	0.482-2.211	0.793	0.369-1.707
	Elementary school	0.827	0.418-1.638	0.804	0.423-1.529
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.097	0.542-2.220	1.140	0.571-2.274
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	1.030	0.446-2.376	1.117	0.494-2.523
	Enterprises	0.745	0.375-1.479	0.749	0.395-1.420
	Social groups, village/neighbourhood committees	2.874	0.669-12.338	2.140	0.566-8.086
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.709	0.930-3.143	1.465	0.799-2.688
	Middle class	0.603	0.304-1.196	0.591	0.299-1.169
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			1.177	0.260-5.320
	Junior high school			2.272	0.871-5.926
	Senior high school			2.047	0.866-4.834
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.837	0.407-1.722
	Non CCP (reference)			1.000	
Log equivalized income	...			0.580*	0.375-0.899

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

**Table 10** Binary logistic regression models on unhealthy or very unhealthy self-rated health rural women (n = 2047; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	0.834	0.530-1.312	0.643	0.400-1.033
	Elementary school	0.706	0.452-1.105	0.643	0.405-1.022
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	1.045	0.586-1.863	1.119	0.629-1.992
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	0.903	0.442-1.844	0.997	0.481-2.069
	Enterprises	0.775	0.346-1.736	0.957	0.420-2.182
	Social groups, village/neighbourhood committees	0.446	0.167-1.195	0.454	0.174-1.186
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	1.538*	1.050-2.252	1.327	0.893-1.972
	Middle class	0.539**	0.346-0.838	0.513**	0.325-0.810
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			3.928*	1.066-14.481
	Junior high school			2.045	0.563-7.432
	Senior high school			0.984	0.243-3.993
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			1.552	0.516-4.668
	Non CCP (reference)			1.000	
Log equivalized income	...			0.886	0.760-1.033

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

**Table 11** Binary logistic regression models on unhealthy or very unhealthy self-rated health urban women (n = 1020; weighted data)

Variable	Categories	Model 1		Model 2	
		OR	95% CI	OR	95% CI
Father's educational attainment	Non-educated	2.707**	1.333-5.500	2.086*	1.029-4.229
	Elementary school	1.598	0.817-3.124	1.460	0.736-2.896
	Junior high school or higher (reference)	1.000		1.000	
Father's CCP membership	CCP member	0.508	0.222-1.160	0.509	0.225-1.153
	Non CCP (reference)	1.000		1.000	
Father's type of work unit	State-sector employment	2.257*	1.041-4.893	2.399*	1.098-5.241
	Enterprises	0.830	0.451-1.528	0.962	0.512-1.805
	Social groups, village/neighbourhood committees	2.818	0.620-12.808	2.871	0.564-14.628
	No Danwei/self-employment (reference)	1.000		1.000	
Self-rated childhood social class	Lower class	0.851	0.441-1.642	0.702	0.361-1.365
	Middle class	1.457	0.620-12.808	1.366	0.741-2.520
	Higher class (reference)	1.000		1.000	
Educational attainment	Elementary school or lower			0.960	0.336-2.745
	Junior high school			0.890	0.382-2.074
	Senior high school			0.686	0.314-1.501
	Technical college or higher (reference)			1.000	
CCP membership	CCP member			0.651	0.209-2.029
	Non CCP (reference)			1.000	
Log equivalized income	...			0.703**	0.542-0.913

Note: Each model controls for age and marital status. \* p< 0.05, \*\* p<0.01, \*\*\* p<0.001, \*\*\*\* p<0.0001

## Discussion

The primary purpose of this study was to investigate the intergenerational transmission of socioeconomic resources and adult SRH in China. I used a wide-ranging set of indicators to measure the socioeconomic resources of the survey respondents and their parents. I found that self-rated childhood social class and household income were both significantly associated with SRH for both men and women. Father's educational attainment was marginally significantly associated with SRH for men. Father's type of work unit and personal educational attainment were significantly associated with SRH for women. I also found evidence that personal socioeconomic resources explained sizeable portions of the associations between indicators of parental socioeconomic resources and SRH.

In Chinese society, parental socioeconomic resources are crucial to their children's accumulation of resources in adulthood (Chen *et al.*, 2019; Hong & Zhao, 2015; Hong & Liu, 2019; Wu *et al.*, 2019; Fu & George, 2015). In this study, I link parental resources (father's education, father's type of work unit, father's CCP membership and self-rated childhood social class) to personal resources (education, equivalized household income and CCP membership) in an investigation of the intergenerational production of health in Chinese society. Before controlling for personal socioeconomic resources, parental educational attainment was strongly associated with SRH for men and urban women. The associations among men and urban women disappeared after adjustment for personal socioeconomic resources. In particular, I found evidence suggesting that personal education and household income mediate the effect of parental education on SRH. However, the degree of mediation differed by gender. For urban women the percentage was 26.2% whereas for men the percentage was 66.5%, indicating that a greater proportion of the association



between parental education and SRH is explained by personal socioeconomic resources among men than among women. The reason for this gender difference is not clear. The association between parental education and SRH also tended to differ by *hukou* status. Parental education retained a significant relationship with SRH for rural men and urban women but not for urban men and rural women, although the association was only marginally significant for rural men. Similar proportions of the associations between parental education and SRH were explained by personal socioeconomic resources among rural men (27.0%) and urban women (26.2%).

Regarding self-rated childhood social class, after taking socioeconomic resources in adulthood into account a modest association between self-rated childhood social class and adult SRH persisted for both men and women. This is consistent with some existing research in other contexts which suggests that self-rated childhood social class provides greater relative importance than adulthood circumstances for cardiovascular disease mortality (Claussen *et al.*, 2003) and survival rate during the war era (Kuh *et al.*, 2002). The disparity of the KHB decompositions between men and women also suggests that personal SES explains a greater proportion of the association between self-rated childhood social class and SRH among women (46.1%) than among men (31.6%). More specifically, for men aged between 25 and 44 (born between 1971 and 1990), men aged between 45 and 65 (born between 1950-1970) and women aged between 45 and 65 (born between 1950-1970), self-rated childhood social class had greater relative importance than adulthood SES for SRH. For women aged between 25 and 44 (born between 1971 and 1990), self-rated childhood social class did not manifest a significant association with adult SRH. For men with urban *hukou*, men with *rural hukou* and women with rural *hukou*, self-rated childhood social class had greater relative importance than adulthood SES for SRH. For women of urban *hukou*, self-rated childhood social class did not manifest a significant association with their adulthood

SRH.

In contemporary Chinese society, institution power possessed by work units (*danwei*) is an important factor in shaping social inequality, especially in the pre-reform era (before the 1970s) when social resource distribution and economic and social life organization were all fully state-controlled (Fu & George, 2015; Lin & Bian, 1991; Bian & Logan, 1996). Therefore, I also linked father's type of work unit to personal socioeconomic resources in this study. Before controlling for personal socioeconomic resources, father's type of work unit was strongly associated with SRH for women (urban women more specifically) but not for men. The associations among women disappeared after adjustment for personal socioeconomic resources. In particular, I found evidence suggesting that personal education and household income substantially mediated the effect of parental type of work unit on SRH.

Associations between personal socioeconomic resources and SRH persisted after controlling for parental socioeconomic resources. Educational attainment and equivalized household income were both strongly associated with SRH in the samples of men and women aged 25 to 65. In particular, people with higher education and higher household incomes were less likely to be unhealthy. This is not surprising given previous research on socioeconomic resources and SRH in western countries (Winkleby *et al.*, 1992) and in China (Huang & Yin, 2013; Wang, 2017; Hong & Liu, 2019). Strong links between the education level, labour market opportunities and lifestyle practices described in previous research (Huang & Yin, 2013) potentially explain the associations between personal socioeconomic resources and SRH reported in this study.

To investigate how social transformation in contemporary China has an effect on the social life of individuals born in different eras, I further stratified my survey samples by age group. The differing results by gendered age groups likely reflect the changing nature of social mobility across

different eras, which is perhaps more marked among women. Parental resources (father's type of work unit and self-rated childhood social class) were strongly correlated with the SRH of women born between 1950-1970 (aged between 45 and 65) before the market transformation of China. However, they had no significant association with the health of women born after 1971 (aged between 25 and 44). There was also an extremely strong association between personal education and self-rated health among younger women but lower among older women. It may be that the restoration of the college entrance exams from 1977 onwards after the Cultural Revolution provided women with more opportunities to secure a place in universities, which is especially key to procuring well-paid occupations and higher socioeconomic status for women due to the gender wage gap (Chi & Li, 2008) and women's higher rate of return to education (Hannum et al., 2013; Mishra & Smyth, 2015).

Equivalized income and the educational attainment of the respondents themselves were both strongly associated with SRH for women of all ages, which is not aligned with Yamazaki's research in Japan which found that income was only correlated with SRH among men (Yamazaki *et al.*, 2005) or Huang's (2013) research from China which also found that income had little association with women's SRH. In my sample, educational attainment was a better predictor of SRH than was household income for women, which is consistent with some other research (Winkleby *et al.*, 1992). Education is the gatekeeper of higher occupational status, which in turn brings access to better healthcare resources (Fujishiro *et al.*, 2010). Also, higher educational attainment facilitates healthy lifestyles (Huang & Yin, 2013) and healthcare-seeking behaviours (Zhang *et al.*, 2009). However, income had a stronger association with SRH for younger women than for older women in my sample, perhaps because there is less variability in incomes among older women than among younger women.

The market transition perspective contributes to understanding such differences between women. During the planned economy period of P.R. China (1949 to 1980s), the state directly intervened in individuals' employment by way of administrative order, when individuals lack subjectivity in their career seeking (Zhao, 2016). Consequently, women at that time had similar wage levels, all quite low, despite having high levels of education. In the process of "denationalization" and the market transition from the 1980s, social stratification changed as individuals' subjectivity in career seeking was restored (Zhao, 2016). Therefore, younger women are more engaged in the competition of a market-driven human resource market for production incentives and human capital returns (Nee, 1989) which provides well-educated women with more opportunities to procure well-paid occupations.

Results differed markedly for men. Self-rated childhood social class was strongly correlated with the SRH of men from both age groups, yet father's type of work unit was strongly associated only with the SRH of men born after 1970 (aged between 25 and 44). As for personal socioeconomic resources, both education and income maintained a strong relationship with health for men aged between 45 and 65 (born before 1970). For younger men, however, only CCP status membership was strongly associated with SRH. Several previous studies take CCP membership as an indicator of socioeconomic resources because it reflects the connection to the PRC's authority power (Yip et al., 2007; Xue & Cheng, 2017; Norstrand & Xu, 2012). Previous research has typically found that CCP membership is not significantly associated with SRH. However, I found that CCP membership was a strong predictor of self-rated health among men born after 1970. Both CCP membership and type of father's work unit signify a person's institutional resources (Norstrand & Xu, 2012; Walder, 1986), which are considered as essential for procuring resources in the public sector (Norstrand & Xu, 2012). Therefore, my results suggest that younger men

benefit most from CCP membership in public sectors. The persistence of power perspective questions the neoliberal market transition theory by arguing that since individuals having positional and institutional power persists, China's market transformation is still spread out unevenly (Fu et al., 2015; Bian & Logan, 1996). This study extends the existing research by arguing that due to boy-preference in the intergenerational transformation the privilege resulting from power persistence can be accessed by men but not women (especially not rural women). Results suggest that the relationship between the state and individuals which reflects the social changes that have characterized contemporary China is an important factor when it comes to an understanding of the nature of socioeconomic inequalities in health in this national context.

I also found that the degree of mediation for the association between parental socioeconomic resources and personal self-rated health was stronger for equivalized household income than for educational attainment and CCP membership among men. Among women, the degree of mediation was much stronger for educational attainment than for household income and CCP membership. This suggests the existence of different intergenerational transmission pathways for Chinese men and women. It appears that parents tend to use their socioeconomic resources to foster their male children's household incomes by investing economic resources and facilitating the accumulation of wealth for their children via other routes such as helping them procure a well-paying job or providing property inheritance, which eventually pays off in their male adult children's health. For female children, however, parents tend to invest socioeconomic resources in the educational trajectories of their children which eventually pays off in the health of their female adult children. This is not surprising as existing research has found that parents' financial and educational investment on their children's development differ by the gender of the children because parents may perceive the opportunities in the social, economic, and political structure to be different for

sons and daughters (Kornrich & Furstenberg 2012; Carter & Wojtkiewicz 2000) In the context of China, the high status character of housing is especially important for men in the marriage market since homeownership has been long considered as a prerequisite for marriage and an indispensable material foundation of the family in the Chinese culture (Li and Wu 2004). Because of this, families with a son are motivated to accumulate wealth for their son's mating competition and marital housing, while having one or more daughters has no such effect (Yang & Horsewood, 2020). Results suggest that while the one-child policy encourages more parental investment in the education and well-being of urban daughters (Fong, 2002), it has relatively little impact on changing gender-differentiated intergenerational transmission pathways.

Limitations of this study also serve to provide directions for future research in this area. First, the measure of father's type of work unit is less sophisticated than it could be. In particular, I could not distinguish state-owned enterprises (SOE) from private enterprises. Second, the measures of parental economic resources in particular are relatively weak. I used the subjective measure of self-rated childhood social class and the objective measure of father's type of work unit at the respondents' age of 14, neither of which is a direct and objective measure of childhood economic resources. More objective measures of childhood economic status would be welcomed in the future inquiry of this area. Third, I was not able to attain symmetry in regards to the measures of socioeconomic resources of parents and children given that parental *hukou* status and respondent's type of *danwei* were not available in the dataset; parental hukou status was not asked in the survey and respondent's type of work unit had extremely high levels of missing data. Finally, the data applied in this study are cross-sectional which means that I am not able to conclusively discern causal directionality. Longitudinal data that includes information from multiple generations would be valuable in this area of study. Research focused on uncovering different parenting strategies for

sons and daughters would also make a valuable contribution to this literature.

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