

The Impact of Different Educational Experiences on Non- cognitive Ability and Consumption Decision Based on the Analysis of Dynamic Monitoring Data of Floating Population in China

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Abstract

This paper mainly studies the impact of general high education and secondary vocational education on people's non-cognitive ability, which thus influences the consumption decision-making mechanism of floating population. After controlling individual characteristics of the sample (age, gender, household registration, etc.) and income, this article empirically finds that the consumption ratio of floating population graduate from secondary vocational school is higher than that from senior high school, and after further controlling the uncertainty of future revenue and expenditure, this result remains significant. The difference in non-cognitive ability brought by different educational experiences can explain to a certain extent the phenomenon that the consumption proportion of the floating population with vocational education is higher. This article finds that vocational school graduates do a better job in self-control ability, and it is easier to think that there is difference between themselves and local residents, which shows a stronger demand for social recognition. This socially recognized demand is manifested in the fact that vocational education can significantly narrow the gap in consumption levels between migrants and local residents. Meanwhile, this narrowing effect shows a non-linear increase as the income increases.

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1 Introduction

Forty years since China's reform and opening up, a huge floating population has formed in the cities along with China's rapid economic development and special urbanization path. According to the statistics of 'China's floating population Development Report 2017,' in 2016 China's migrant population is 245 million, in which the proportion of 80's new generation has reached 56.5%, i.e. the main force of the floating population.

At present, senior high school education consists of two types: general high school and secondary vocational education (both education of three years). By the end of 2016, there were in China nearly 11,000 secondary vocational schools and 16 million graduates, accounting for 40% of the total number of graduates enrolled in high school education. It can be seen that secondary vocational education plays an important role in high school education. Relatively general education is mainly for the purpose of studying for higher education. Secondary vocational education takes employment as the main objective, and it also emphasizes the training of skills for specific occupations.

Is there no difference in the impact of different educational experiences on the new generation of floating population entering the cities? This article focuses on the impact of secondary vocational education and general high school education on the consumption behavior of the new generation of floating population after employment. It is found that the average consumption proportion of the floating population in secondary vocational education is higher, and it shows stronger social recognition in consumption. Therefore, this study not only provides a deeper understanding of how to promote the popularization of high school education, but also has important significance for understanding how education can better promote the integration of the new generation of floating population into cities and accelerate the process of citizenization, all of which have strong practicality and timeliness.

2 Literature background and innovation

2.1 Review of relevant literature

It is above all related to a variety of theoretical models of consumer behavior. Classical consumption theory believes that consumption is affected by the level of income and the uncertainty of future income and expenditures. Life-cycle theory of consumption and permanent income theory (Modigliani, 1963; Bewley, 1977;

Hall, 1978) sees rational consumers would expect persistent income according to future revenue and wealth growth, and the current consumption will be determined based on their persistence income. At the same time, there are also literatures that liquidity constraints (Flavin, 1981; Hansen, 1982) make it difficult for consumers to make intertemporal allocation of consumption, thus making the theory of life cycle consumption and persistent income theory untenable. Precautionary Theory (Leland, 1978; Deaton, 1991) stressed that consumers will make additional savings because of the risk aversion and uncertainty in coping with balance of future payments. In addition to being affected by income, relative income theory (Duesenberry, 1949; Freixas, 1985) proposed ratcheting effects and demonstration effects. Ratcheting effects thinks it is hard to change their short-term consumer inertia, so that the consumer features appear "easy on hard down" and the demonstration effect of consumption (Carroll, 2000) will make consumers be more vulnerable with their own income or the influence of other consumer's consumption behavior with similar features, thus having "chasing" characteristics. Many literatures also link consumption with social structure and believe that consumption is not only influenced by economic factors, but also has social value that embodies social class status. By imitating consumer behaviors of specific social groups, it can show homogeneity between itself and those around it, and then improve positioning and identity recognized by society (Weber, 1987; Veblen, 1944; Bourdieu, 1977). The literatures in China also addresses the traditional theory and "consumer social appreciation theory" (Chen Shangcong, 2017) to verify and analyze the consumption behavior of Chinese urban residents, urban and rural residents, farmers and floating population theoretically and empirically. In short, researches believe that not only economic factors (such as income, uncertainty of future revenues and expenditures) affect consumption, but also social factors (such as social recognition, demonstration effects, etc.) should be considered.

The second is the measurement and influence of cognitive and non-cognitive skills. Cognitive competence is generally defined as academic and computational, vocabulary and sentence comprehension, reading comprehension, and so on. Spence (1973) proposed the role of cognitive ability in social stratification, and argued that high academic qualifications represent high skills, and that they can gain greater success and new skills in the new environment. However, they neglected non-cognitive abilities (such as personal characteristics such as credibility, self-control, accountability, and social competence). The economists of the new theory of human capital like Heckman (2005,2006) divided human capital into cognitive and non-cognitive capabilities, and believe that both cognitive ability of the workforce (ability of mathematics and calculations, vocabulary and sentence comprehension) and non-cognitive ability (job stability, reliability, social skills, etc.) have a significant impact on wages and future achievements. Bowles (2001) proposed "incentive enhancing preferences" and found that employees with this preference are more involved in their work and more able to gain

employer trust. There is relatively little research on cognitive and non-cognitive skills in China. Huang Guoying (2017) used CFPS to obtain the level of cognitive ability and non-cognitive ability of the surveyed people, and found that the higher the cognitive and non-cognitive ability of China's urban labor force, the higher the income; but the explanatory power of both abilities after controlling the education level decreased significantly. Other scholars (Liu Yanzi, 2017) have also yielded similar results, and found that family environment plays an important role in enhancing the non-cognitive ability.

2.2 Research issues in this article

Existing studies mainly focus on the impact of non-cognitive ability on income (Heckman, 2005; Heckman, 2006), and less directly on the impact of non-cognitive ability on consumption. One reason is that it is difficult to exclude the endogenous effects of income. And China's vocational education system and unique dual employment structure provide a good opportunity for this study to examine whether different educational experiences will influence consumer decision-making by changing the difference of cognitive and non-cognitive abilities of the educated.

First of all, according to the regulations of the Ministry of Education of China, secondary vocational school qualifications and high school education (three years of normal schooling) are collectively referred to as "high school graduates or have the same educational qualifications" and can both apply for entry to the general college entrance examination. In fact, they are often viewed equally in the labor market.

Second, the formation of a dual labor market² between China's huge population of migrants and the influx of residents (Cai Fang, 2005; Yan Shanping, 2007), has resulted in young laborers who graduated from high school or graduated from secondary vocational school can only choose to work in labor-intensive industries with low employment barriers. Their mobility is relatively strong and income differences are small. Furthermore, from the perspective of the educational experiences of the two groups, they both have completed different levels of high school education after completing nine-year compulsory education. And from the perspective of whether they enter college, we can think there is little differences in ability and IQ of them³. That is, the differences in potential cognitive ability have

² The dual labor market theory holds that there is a primary sector and a secondary sector. The former mainly includes government agencies, education and scientific research institutions, or large corporations that allow human capital to be properly evaluated. The latter is composed of Informal SMEs with relatively low wages, relatively poor welfare, and unstable employment.

³ Graduates who choose to study at a vocational high school or a technical vocational school select vocational education in advance because they are not expected to enter the university, while graduates who have chosen to attend a high school but fail to enter the university are actually unable to attend college. Statistically, it can be considered that there is little difference between the

been well controlled⁴. Though the difference in their potential cognitive ability is well controlled, the two different educational experiences themselves may cause differences in the non-cognitive ability of secondary vocational school graduates and high school graduates. In summary, the selection of high school education and secondary vocational school education samples from the floating population can perfectly control the variables such as economic factors and unobserved individual cognitive abilities, so that we can better study the impact of education experiences on consumption decisions of the two groups, and the role played by differences in non-cognitive capabilities.

This paper selects the floating population with the same educational years from secondary vocational school and high school education background as research samples, effectively controls the comparability of the sample, and obtains the differential features of consumption behavior for the of specific floating populations with vocational education and high school education experience. At the same time, after controlling factors such as income and uncertainty of future revenues and expenditures, this article finds that the floating population of secondary vocational education qualifications is more likely to be affected by the average level of urban residents' consumption and tends to increase consumption to get the average consumption gap with urban residents smaller , and to gain stronger social recognition.

2.3 The innovation of this article

This article has two major contributions to the existing literature. The first contribution is that a relatively new idea was selected to bring the interference of unobservable factors of the sample under control as much as possible, which improves the reliability of empirical results. The second contribution is that the research issue is an effective supplement to the existing literature. It not only focuses on the impact of vocational education on the consumption decision of the floating population, but also explores the impact of different educational experiences on people's non- cognitive ability which affects the consumption mechanism, and enriches the consumption theory.

Through this study, we can help the society further understand the impact of vocational education in a deeper way and help China better improve its education system. Meanwhile, it can further deepen the understanding of the migrant population's consumption and psychological conditions. It is also of great significance for encouraging domestic demand, improving the city's inclusiveness, accelerating the floating population's integration into the city and finally achieving a more balanced development of the population structure

two situations.

⁴ Although this article demonstrates the consistency of potential cognitive ability between the two types of graduates through empirical facts, but to this extent, the existence of dual labor market also limits the ability to use cognitive resources in human resources, making non-cognitive ability play a leading role.

3 Data sources and description statistics

3.1 Sample selection and empirical model

This paper selected the 2010-2013 dynamic monitoring data of floating population of the National Health and Family Planning Commission of China. According to the education status of the entry person, we select the age of 16-25 year-old, unmarried, general high school or secondary vocational school education qualified and alone floating subjects as samples, a total of 17,897 observations.

The reason for choosing the above sample is mainly based on two considerations. On the one hand, considering that the consumption decision of the floating population is closely related to the decisions on marriage, childbirth, and old-age care, and will be influenced by floating family strategies (such as whether they are couple, whether they are carrying young children and old parents, etc.), thus making it very complicated to explore the relationships between consumer decision-making and education and not conducive to gain credible results. On the other hand, from the ‘learning by doing’ point of view, long working experience of floating population can reduce the impact of schooling on them, it is difficult to determine whether the consumer or other behavioral differences are caused by the different educational experience. Therefore, this article addresses these two issues by controlling the age, marital status, floating family number of migrants.

In order to examine the impact of vocational education on the consumption behavior of migrants, this article first establishes a basic regression.

$$c_ratio = \beta_0 + \beta_1 * edu_exp + \beta_2 * control\ variables + \epsilon \quad (1)$$

Where *c_ratio* includes the overall consumption ratio of floating population (*con_ratio*) and the proportion of effective consumption after adjustment of rent and food expenditure (*con_ratio1*)

3.2 Variable Definition and Description

Table 1: Variable Definition

variable	definition
Mainly explained variable	
<i>con_ratio</i> /	Monthly household income ratio
<i>con_ratio1</i>	$Con_ratio = cost_m / famincom_m$ $Con_ratio1 = (cost_m - rent_m - food_m) / (famincom_m - rent_m - food_m)$

condif_ratio The gap between household monthly per capita expenditure and per capita expenditure in the city is calculated based on data from the National Health and Family Planning Commission's floating population survey and the city's per capita consumption level (city_cst) announced by the National Bureau of Statistics of China .

$$\text{Condif_ratio} = (\text{con_per-rent_m} - \text{city_cst}) / \text{city_cst}$$

Main explanatory variables

edu_exp According to the person completing the questionnaire educational qualifications of measure. “ edu_exp ” is a dummy variable, in which the floating population of secondary education is defined as “ edu_exp=1 ” and the floating population of high school education is defined as “edu_exp=0” .

Major control variables

age age

gender Dummy variable: 1 for males and 0 for females

acc_nature Dummy variable: urban household registration is 1, otherwise 0

unit_whe Dummy variable: 1 for the company, otherwise 0

unit_soe Dummy variable: State-owned enterprise is 1, otherwise 0

whe_2ind Dummy variable: 1 for the secondary industry, 0 otherwise

whe_3ind Dummy variable: 1 for the tertiary industry, 0 otherwise

flo_dur Surveyer's current flow duration

flo_rage Dummy variable: flow in the province is 1, otherwise 0

house_own Dummy variable: 1 in the house owned locally, otherwise 0

price_indx Consumer prices relative to the inflow and outflow of: Price_indx = inflow provinces CPI / outflow CPI , the year before the equation using the relative CPI prices

Other variables

cost_m Total monthly household expenditure: according to survey questions " your home in how much money the local total expenditure per month (cost_m) " and " How much of your total monthly household income in local (famincom_m) " to build

famincom_m	Monthly household gross income: According to the questionnaire question “ How much is your home’s total monthly local income? ”
rent_m	Monthly household rent expenditure: according to survey questions " your home in the local monthly rent of how much money expenditure (rent_m) " to get
food_m	Monthly household food expenditure: according to survey questions " your home in the local food a month how much money expenditure (food_m) " to get

3.3 Main variable description statistics

As shown in Table 2, the sample of secondary vocational education backgrounds accounted for 39%, the average age was 21.8 years, male accounted for 52%, the proportion of urban residents accounted for 14%, the proportion of employment of state-owned enterprises was 10%, the proportion of secondary industry was 30%, the proportion of tertiary industry 70%, the average inflow time was 1.74 years, 54% of the floating population belonged to the province and less than 2% owning houses.

Table 2: Descriptive Statistics of Main Variables

Variable name	Variable definitions	N	Mean	St.dev.	Min	Max
con_ratio	Monthly household income ratio	17,897	0.57	0.20	0.023	10
cost_m	Average monthly expenditure	17,897	1271	715.9	50	20001
income_m	Average monthly income	17,897	2375	1217	100	10000
rent_m	Average monthly rent	17,897	255.1	305.7	0	8000
food_m	Average food expenditure	17,897	558.6	364.0	0	5000
city_cst	Average monthly expenditure of urban residents	16,356	1839	697.8	691.7	3721
city_revsn	Average monthly expenditure of	16,356	2271	678.4	885.3	3721

	urban residents					
	Education					
edu_exp	experience	17,897	0.39	0.49	0	1
age	age	17,897	21.8	2.11	16	25
gender	gender	17,897	0.52	0.50	0	1
	Nature of					
acc_nature	residence	17,897	0.14	0.35	0	1
	Whether the					
	employment					
	unit is a					
	state-owned					
unit_soe	enterprise	17,897	0.10	0.30	0	1
	Is it unit					
unit_whe	employment?	17,897	0.64	0.48	0	1
	Is employment					
	the second					
whe_2ind	industry	17,897	0.30	0.46	0	1
	Is employment					
	the third					
whe_3ind	industry	17,897	0.69	0.46	0	1
	This inflow					
flo_dur	duration	17,897	1.73	1.90	0	23
flo_age	Inflow range	17,897	0.54	0.50	0	1
	Do you own a					
house_own	house?	17,897	0.018	0.13	0	1
	CPI of					
	inflows/CPI of					
price_indx	outflows	17,897	0.96	0.35	-6.50	5.75

4 Empirical Results and Analysis

4.1 Educational experience's impact on consumer decision-making and empirical analysis

When analyzing the impact of educational experience on consumer decision-making, this article does not directly use expenditure as an explanatory variable, mainly based on two reasons. Firstly, the direct comparability is relatively poor as the city's price level and consumption level is quite different. Secondly, income, as an important variable affecting expenditure, has a strong correlation with educational experience and other control variables, and directly adding it will affect the statistical validity of the regression equation. Many literatures also use the proportion of consumption as the main explanatory variable (Fan Jianping, 1999; Li Wenxing, 2008). This article also continues the practice of

other scholars to use the proportion of total consumption and other types of consumption after food and housing expenditure to represent the consumption characteristics of floating population. Before demonstration, the samples will be first explained and adjusted according to the sample characteristics and the actual situation.

4.1.1 Actual disposable income, proportion of actual disposable consumption and income grouping

This article takes into account that the food and rent expenditure of a considerable part of 35% samples is 0 RMB Yuan, because the employer provides employees with free accommodation and working meals. This article describes such samples as "free packet of accommodation" sample. In general, employees would be paid less wages in this condition. Considering the work with "free packet of accommodation" may be given relatively low wages, it will result in an overestimation of the proportion of other categories of consumption. In order to exclude the possible overestimation of average monthly income and *con_ratio* caused by "free packet of accommodation" sample, this paper constructs "*con_ratio1*" to do the empirical analysis and ensures accuracy.

In the grouping, in order to better control income and ensure the comparability of income, this article defines the migrants whose comparable income level is less than the lowest wage income of the city as the first group (*income_group*=1); and migrants whose comparable income level higher than the lowest income standard, but less than the average monthly income of the city residents as the second group (*income_group* = 2); and migrants whose comparable income higher than the average monthly income of the city residents as the third group (*income_group*=3). It can be seen that there are less than 3% of the total samples in Group 1, indicating that the minimum income requirement has actually played a practical role; and the sample size of Group 2 is 56.7% of the total sample, i.e. more than 1/2 of the floating population's wages are below the average monthly income of the city; while Group 3's sample size is 41% of the total sample. The distribution of educational experience is roughly the same in different income groups, and the difference between income and actual disposable income is not significant at the 5% level of significance.

4.1.2 Excluding "Excess Expenditure Type" sample

And in practice due to various reasons (such as temporary unemployment or flow into a shorter time and other reasons) there will be a higher short-term consumer pressure, which can lead to overall consumption ratio is the proportion of consumption and other categories of more than 1. This article called this kind of sample temporary "excess expenditure type" sample, with a total number of 312, accounting for 1.74% of the total sample.

Among them, the proportion of "excess expenditure type" samples of secondary vocational education is 2.13%, slightly higher than that of high school graduates,

which is 1.53%. Compared with other non-"excess expenditure" samples of the same schooling background, the characteristics of the "excess expenditure type" floating population with vocational education are more different, and the overall presentation is more youthful, feminized, urban account registered, and with characteristics of intra-provincial mobility and state-owned enterprises employment . But the impact of housing and the industrial division of employment are not obvious. And removing the sample of "excess expenditure type" in the total sample has also no significant impact on the income differences within the group after income grouping. The average income of floating population in different education experiences in different income groups is basically the same.

4.1.3 Empirical analysis of consumption ratio and education experience

Taking into account the small number of observations (2% of the total sample) in the subgroups with wages less than the minimum wage in the city, and below the minimum wage suggesting that the employment status of these samples may be abnormal, this paper in Table 3 mainly shows that the main regression results of income group 2 and income group 3.

Table 3: Empirical Results after Grouping by Income

	con_ratio		con_ratio1	
	Income group 2	Income group 3	Income group 2	Income group 3
edu_exp	0.007 * (1.78)	0.008 * (1.67)	0.005 (0.96)	0.015 *** (2.91)
age	0.002 ** (2.25)	0.001 (1.19)	-0.004 *** (-3.64)	-0.002 * (-1.83)
gender	-0.011 *** (-2.86)	-0.001 (-0.23)	-0.008 (-1.58)	-0.004 (-0.84)
acc_nature	0.022 *** (3.69)	0.034 *** (5.61)	0.019 *** (2.65)	0.021 *** (3.04)
flo_dur	0.003 *** (3.14)	0.002 (1.48)	0.004 *** (2.84)	0.001 (0.46)
flo_rage	0.047 *** (11.62)	0.040 *** (8.89)	0.052 *** (10.28)	0.043 *** (8.33)
price_indx	-0.010 * (-1.83)	-0.026 *** (-4.07)	-0.025 *** (-3.54)	-0.049 *** (-6.79)
unit_soe	0.009 (1.21)	0.012 (1.58)	0.005 (0.54)	-0.004 (-0.48)
unit_whe	-0.012 *** (-2.60)	-0.004 (-0.73)	0.006 (1.12)	0.012 ** (2.07)
whe_3ind	0.057 * (1.65)	0.065 * (1.88)	0.060 (1.37)	0.011 (0.27)

house_own	0.001 (0.08)	-0.005 (-0.30)	0.090 *** (4.44)	0.110 *** (6.40)
c	0.477 *** (11.64)	0.431 *** (10.13)	0.364 *** (7.10)	0.334 *** (6.96)
Time effect	control	control	control	control
Regional effect	control	control	control	control
N	9983	7322	9983	7322
R2	0.051	0.057	0.025	0.029

t statistics in parentheses; * p< 0.05, ** p<0.01, *** p<0.001

From the regression results of the basic equations in Table 2, we can see that the experiences of vocational education make the floating population of income group 2 significantly 0.7% higher than high school graduates of the same group in the same situation. And in the income group 3, although undergoing vocational education will increase the proportion of consumption, but the impact was not significant. In the regression equation of the real disposable consumption ratio of other categories (net of rent, food expenses), the experience of secondary vocational education in group 3 will significantly increase the consumption proportion of floating population by 1.4%; while in the income group 2, the positive effect of vocational education on the proportion of consumption is not significant.

At the same time, urban household registration, inflow time, intra-provincial flow, tertiary industry employment, housing ownership (inflow of cities) can all significantly increase total consumption ratio and other categories of consumption ratio in group 2 and group 3. The positive promotion effect of urban household registration is mainly due to the wealth accumulation effect of urban household registration in China's reform and opening up (for example, the housing system reform allows urban residents to freely trade houses in their households registered place; but in rural areas, the land system provides that the agricultural population only own the land use rights for housing and arable land, ownership still belonging to the state or collective), so the urban floating population can have higher permanent income under the same conditions, thus increasing to a certain extent the proportion of consumption in the current period. Increased flow time and intra-provincial flows can help migrants become more familiar with work and the environment, increase information symmetry, and reduce employment risks to a certain extent (Heckman 2006), which can also reduce the need for preventive savings and increase the proportion of consumption. At the same time, the role of tertiary employment in increasing the proportion of employment has also been verified by scholars at the macro level (Xiao Yudan, 2016), which starts from a microscopic point of view and shows that the mutual promotion between the development of the tertiary industry and the rising proportion of household consumption, and the promotion can be achieved through more people with

employment in the tertiary industry. Age in group 2 has a lowering effect on the overall proportion of consumption, but in other cases its impact on the two types of consumption ratio is not significant.

The relative price level of inflow and outflow has a negative effect on consumption proportion, which is also consistent with the finding in the literature (Dustmann, 2007; Stark, 2013; Kirdar, 2005). The floating population will make more spending in relative lower-price inflow or household registered land, thereby increasing overall purchasing power. While males can significantly reduce the overall consumption ratio in group 2, but having no significant effect on the proportion of actual disposable consumption in other categories .

The time effect of the equation is controlled by adding the fixed effect of the year, and the regional effect is controlled by adding the inflow into the economic zone to which the city belongs (southeast, central, northeast, and west).

4.2 Analysis of the mechanism

Judging from the regression results of the above basic equations, after controlling income differences, the whole consumption ratio the floating population of secondary vocational education background is significantly 0.7% higher than that with high school education; after deducting rent and food expenses, there is still a similar difference in the proportion of actual disposable consumption between the two groups (vocational qualifications are 1.4% higher).

As above in this paper, after a reasonable income grouping and sample controlling for age (16 to 25 years old) , the average income levels of the two groups shows no significant difference. Therefore, in the mechanism analysis, this article mainly analyzes from the theory of preventive saving and social consumption, and focuses on the analysis of social consumption theory.

4.2.1 Uncertainty and preventive saving theory

Is it because the stability of different jobs in different sectors (such as the insurance term contracts signed or offered, etc.) that leads to different assessments of the uncertainty of future income, and then to different consumption? Vocational school graduates in employment faced with less uncertainties in the future, resulting in higher current consumption? By adding variables such as whether there have contracts and insurance or not, the paper examines the role of uncertainty in determining the different consumption patterns of the two types of floating population as shown in Table 4 and Table 5.

Table 4: Contract Signing and Precautionary Saving Incentives

	con_ratio		con_ratio1	
	Income group 2	Income group 3	Income group 2	Income group 3
edu_exp	0.012* (1.82)	0.009 (1.06)	0.011 (1.42)	0.021 ** (2.35)
contract	-0.010 (-1.49)	-0.010 (-1.21)	-0.005 (-0.58)	-0.009 (-0.93)
N	3626	2257	3626	2257
R2	0.065	0.093	0.166	0.151

t statistics in parentheses; * p< 0.05, ** p<0.01, *** p<0.001

Variable “Contract” measure whether the worker have assigned a labor contract with the employer (1=sign a contract; 0=sign no contract).The empirical results show that signing contracts has no significant effect on the proportion of consumption, indicating that whether or not signing a contract during the work of the floating population has limited effect on their uncertainty in reducing employment.

Table 5: Insurance and Precautionary Saving Motivation

	con_ratio		con_ratio1	
	Income group 2	Income group 3	Income group 2	Income group 3
edu_exp	0.015 *** (2.65)	0.009 (1.44)	0.012* (1.68)	0.017 ** (2.25)
medical insurance	0.016*** (2.08)	0.019** (2.07)	0.053*** (5.83)	0.056*** (5.37)
Injury insurance	-0.015* (-1.69)	0.003 (0.32)	0.029*** (2.66)	0.043*** (3.93)
Unemployment insurance	0.002 (0.20)	-0.005 (-0.40)	-0.043*** (-3.36)	-0.045*** (-3.43)
N	4841	3477	4841	3477
R2	0.056	0.083	0.090	0.088

t statistics in parentheses; * p< 0.05, ** p<0.01, *** p<0.001

The coverage of various types of insurance has a significant impact on the floating population, and medical insurance (new rural cooperative medical insurance or urban residents' medical insurance) plays the most significant role in increasing the proportion of the floating population's consumption (in group 2 and 3, the average increase in proportion of total consumption was 1.6% and 1.9%, and the proportion of actual disposable consumption in other categories was increased by 5.3% and 5.6% respectively). This shows that the motive for the preventive saving of 16 to 25-year-old migrants mainly comes from the uncertainty about the future

health status. The effect of occupational injury medicine on improving the actual disposable ratio of other categories is also significant, increased by 2.9% and 4.3% in group 2 and 3 respectively, further demonstrating that concerns about future physical conditions encourage young workers to increase savings rates. The effect of unemployment insurance on the proportion of total consumption is not obvious, and it has a declining effect on the proportion of other categories of consumption, decreased by 4.3% and 4.5% in group 2 and 3 respectively.

However, after controlling the difference of contract and insurance, vocational education still has a significant positive effect on the proportion of consumers. Compared with the previous empirical results, after controlling the uncertainties of the future income and expenditure, the role of vocational education in the proportion of consumption has been further strengthened.

4.2.2 The influence of non-cognitive ability and social recognition on consumer behavior

The above analysis shows that after controlling the uncertainty of work and future income, vocational education can still significantly increase the proportion of the floating population's consumption. Why do different education experiences have such differences in consumer behavior? Based on the above analysis and empirical results, this paper attempts to explain the different effects of vocational education and general education on the non-cognitive ability of floating population. It's generally believed that non-cognitive abilities include working stability, reliability, social skills, and personality traits including self-control, etc.

From the main activities of the subjects in their free time, the enthusiasm of participating in community activities, the composition of daily interactions etc. in the survey questionnaire, we can sort out some indicators to show the differences in different non-cognitive abilities. This article describes the non-cognitive ability indicators and differences in Table 6.

Table 6: Index and Non-cognitive Ability Mean Differences (T-test)

index		edu_exp =0	edu_exp=1
Self-control ability	Play games	0.30	0.29
	Smoking	0.24	0.23
	Self-learning	0.38	0.44 ** *
Optimistic indicator	Do you feel happier?	0.54	0.56
Export-oriented indicators	communicate with local people	0.09	0.09
	Think no difference with local people	0.48	0.45***
	Participate in community activities	0.57	0.55

When assessing the difference in non-cognitive ability according to the indicators system, it can be seen that the floating population in the background of vocational education is no different from the high school graduates in optimism, sometimes even higher; and in daily life they have a stronger self-control ability and higher proportion of self-learning. Meanwhile with regard to the outward-looking index, more of them believe there is differences between them and local residents. The social consumption theory (Weber, 1924; Veblen, 2004; Baudrillard, 2001) argues that consumption embodies a person's social class and thus can be used as a means to obtain social identity. Is it because whether vocational education feels the difference with the local people of inflow cities, so as to obtain local people's identity through consumption?

In order to verify this conjecture, this article compares the floating population with the level of consumption of the urban residents in the city, and sees whether vocational education will have a different impact on the relative consumption gap. If vocational education can significantly narrow the gap between the floating population and the urban residents' consumption levels, then we can say that the floating population during consumption is more susceptible to the influence of the urban residents' consumption, which furthermore proves that the socially recognized value of consumption does exist.

The dependent variable is *condif_ratio*, measuring the gap between household monthly per capita expenditure and average per capita expenditure of citizen in the city.

Table 7: The Influence of Educational Experience on Consumer Behavior
Society Recognition Demand

	Condif_ratio		
	Income group 1	Income group 2	Income group 3
<i>edu_exp</i>	0.016 (0.76)	0.008 * (1.79)	0.023 ** (2.17)
Other variables	controlled	controlled	controlled
N	361	8777	7218
R2	0.060	0.042	0.047

t statistics in parentheses; * p< 0.05, ** p<0.01, *** p<0.001

From the results in Table 7, the vocational education experience can indeed narrow the relative gap between the floating population and the local residents, and as the income level rises, this closer effect is even more pronounced. In group 2 (migrants' income higher than the minimum wage, but less than the local average income level), the vocational education experience can bring the relative consumption gap closer to 0.8%; while in group 3, such experience even significantly reduce the relative consumption gap of 2.3%. So the Empirical

results in Table 6 demonstrate the article about the different educational experience will affect the consumer behavior by changing the non-cognitive abilities of graduates. Specifically, due to the social recognition of qualifications on the consistency and the existence of dual labor market, the floating population of high school education and vocational school education background upon graduation to enter the labor market, maintain a high degree of agreement on employment type (engaged in labor-intensive industries) and salary income. However, vocational education compared to general education has raised the graduates' demand for higher social recognition, thus leading them to show a smaller gap with the level of local residents' consumption, and thus improving their proportion of consumption to a certain extent.

5 Conclusion

This article selects the secondary vocational school graduates and high school graduates in the floating population, and controls to a certain extent the differences of the number of years of education and their corresponding potential cognitive abilities, and combines the characteristics of the dual labor market in China to study how the vocational education relative to general education affect the characteristics of consumer behavior by changing non-cognitive ability through education? Specifically, due to the social recognition of qualifications on the consistency [9] and the existence of dual labor market, the floating population of high school education and vocational school education background upon graduation to enter the labor market, maintain a high degree of agreement on employment type (engaged in labor-intensive industries) and salary income. However, vocational education compared to general education has raised the graduates' demand for higher social recognition, thus leading them to show a smaller gap with the level of local residents' consumption, and thus improving their proportion of consumption to a certain extent,

After controlling the individual characteristics (e.g., age, gender, residence, household registration, etc.) and income of samples, this paper finds that the consumption ratio of the floating population with vocational education background is higher with respect to that from high school. From the perspective of preventative savings, it's found that signing labor contracts shows little effect on reducing the precautionary savings of floating populations, but insurance (especially medical insurance and work-related injury insurance) can significantly reduce the precautionary saving behavior of young laborers, thus illustrating one of the main motivations for the precautionary saving of floating population is the uncertainty about the future physical condition. When analyzing the difference in non-cognitive ability, this paper finds that secondary vocational school graduates do a better job in self-control ability, and mind their differences with local residents and show stronger social recognition requirements. This socially recognized demand is manifested in the fact that vocational education can

significantly narrow the gap in consumption levels between migrants and local residents. Besides, this narrowing effect shows a non-linear increase in the income of migrants.

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