

Does Education Foster Beliefs in Meritocracy? Evidence from China

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Abstract

It is widely believed that the allocation of occupations and social prestige in modern societies should be based on educational qualifications rather than family origin, but relatively little scholarly work has empirically studied how educational attainment shapes ordinary people's perceptions of education-based meritocracy. An analysis of nationally-representative data from the 2010 China Family Panel Study (CFPS 2010) reveals that people with more schooling tend to hold stronger meritocratic beliefs than their less-educated counterparts. Using an instrumental variable approach, the analysis reveals that education has causal effects on meritocratic beliefs, and that the effects of education on opinions about meritocracy are greater for relatively disadvantaged social groups, who tend to believe that merit plays a more important role than family origin for socioeconomic advancement. These findings further our understanding of Chinese citizens' high-level tolerance of inequality despite the sharp rise in income inequality in China in past decades.

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Introduction

Public perceptions about the relative importance of ascribed characteristics versus achieved qualifications in determining socioeconomic success shape public expectations of opportunities for social mobility, attitudes toward inequalities, and preferences for social-welfare policies, and provide ideological legitimacy for the systems of social stratification. A number of studies have shown that popular attitudes toward social inequality and redistribution policies are shaped by perceptions about the causes of wealth and poverty. Those who believe that economic outcomes are determined by individual merit (e.g., ambition, education, effort) are usually more tolerant of inequality and more reluctant to distribute resources from rich to poor. In contrast, those who believe that inequality arises mainly from factors unrelated to personal merit (e.g., sex, race, family origin) are typically less tolerant of inequality and make more vociferous demands for redistribution (Alwin, Kluegel, and Smith 1987; Bénabou and Tirole 2006; Jaime-Castillo and Marqués-Perales 2014; Linos and West 2003).

The allocation of occupational positions and economic wealth based primarily on merit has been widely accepted as a principle of economic justice in modern Western societies (Breen 2001; Kunovich and Slomczynski 2007; Oorschot and Halman 2000). For instance, most people in the U.S., well known as a “land of opportunity,” believe that they can improve their social or economic status by acquiring more education and working harder (Reynolds and Xian 2014). Sociologists have consistently documented

a shift from ascription to achievement as the primary basis for distributing socioeconomic rewards, and highlighted formal education as a key channel for upward mobility in industrialized societies (Blau and Duncan 1967; Blossfeld and Shovit 1993; Treiman and Yip 1989).

Economic and political transformation in post-socialist regimes is usually accompanied by fundamental shifts in social norms and values (Smith and Matějů 2012). Since China's economic reforms in 1978, there has been an increasing emphasis on the meritocratic allocation of occupations and wealth (Cao 2004). Voluminous empirical evidence has shown a decrease in the influence of characteristics unrelated to merit (such as class origin and political attributes) and an increase in the importance of personal merit (especially formal education) in allocating life chances and socioeconomic rewards (Bian and Logan 1996; Nee 1989; Wu and Xie 2003; Zhao and Zhou 2002). And indeed there has been a substantial increase in returns to education since the 1990s (Zhang et al. 2005). Educational qualifications have become increasingly important for people's careers. For instance, even the State Civil Servants system has introduced an open competitive examination to regulate entry (Tsao and Worthley 2009).

Despite the rise of meritocracy in China, relatively few scholars have analyzed ordinary Chinese people's perceptions of the meritocratic allocation of rewards and the role of educational attainment in shaping their perceptions of China's opportunity structure. Despite the sharp rise in income inequality in China in recent years, the evidence suggests that Chinese citizens were quite tolerant of income inequality, at

least in 2010 (Whyte 2016; Wu 2009; Xie 2016). Could increases in Chinese people's schooling due to the massive expansion of education in late 1990s explain this puzzle ?

To extend our knowledge of public perceptions of China's social stratification system, we analyze nationally representative data from the 2010 Chinese Family Panel Study (CFPS 2010), with reference to the relationship between individuals' educational attainment and their perceptions of meritocracy. Specifically, the study explored the following questions: Do individuals who have had more education hold stronger beliefs about meritocracy? And does the relationship between education and such beliefs vary among social groups who have benefited differently from China's economic reforms?

The article is organized as follows. In the next section, we briefly review the literature on educational attainment and public beliefs in meritocracy and propose our research hypotheses. Next, we describe the data and measures, and report the results of ordinary least squares (OLS) regression to determine the heterogeneous effects of education on meritocratic beliefs, followed by the results of instrumental-variable analysis to identify the causal effects of educational attainment on public beliefs about meritocracy. Finally, we discuss the implications of the findings and conclude the paper.

Educational Attainment and Meritocratic Beliefs

Public beliefs about the determinants of socioeconomic success are concerned with "who receives what and why," issues central to the concept of social stratification (Shepelak 1989). Ordinary people's perceptions of the causes of poverty and wealth are believed to be closely related to their position within the social status hierarchy (Kohn and Schooler 1969). In general, there are two competing theories about the relationship

between educational attainment and meritocratic beliefs. According to the economic self-interest theory, people of higher social status and more schooling are more likely to support the allocation of social resources based on qualifications achieved (through education and effort, for example). According to the system justification theory, however, lower-status and disadvantaged groups are more likely to perceive social stratification as legitimate and to accept meritocratic beliefs than their higher-status and more advantaged counterparts.

Economic Self-interest and Meritocratic Beliefs

According to the economic self-interest theory, individuals' attitudes toward distributive justice can usually be interpreted in terms of expected gains and losses (Simmons 1962). The basic assumption is that people with different interests and positions in the social structure tend to justify their own status. As people with more education and ambition benefit more from the meritocratic allocation of income and other socioeconomic outcomes, they tend to defend the economic system as just and desire its continuation. In contrast, people with less education benefit less from merit-based selection, and thus tend to disagree with such practices and prioritize other bases for differences in socioeconomic outcomes, such as principles of equality or need.

Consistent with the economic self-interest theory, empirical studies show that the economically-advantaged tend to attribute their economic success to internal qualities such as personal ability and effort, whereas the economically-disadvantaged are less likely to attribute their lack of success to individual factors (Kraus, Piff, and Keltner 2009; Kreidl 2000; Narita and Manire 1976; Oorschot and Halman 2000; Shepelak 1989). Kunovich and Slomczynski (2007) analyzed data from 14 counties collected in

the Social Inequality module of the 1992 International Social Survey and showed that better-educated individuals and those with higher incomes had stronger meritocratic beliefs. This pattern also holds true in the U.S. Reynolds and Xian (2014) found that young, upper-class whites were the most likely to perceive the U.S. as a meritocratic society, whereas older and lower-class members of minorities were more likely to believe that factors unrelated to merit had determined their opportunities to get ahead.

In China, market-oriented reforms have promoted a rise in the education-based allocation of life chances and economic success, and education has become an increasingly important factor determining individuals' socioeconomic outcomes. Thus, the economic self-interest theory would suggest that in China too, people with more years of education are likely to hold stronger meritocratic beliefs than those less educated.

H1: Individuals with more schooling tend to hold stronger meritocratic beliefs than those with less education.

System -Justification Theory and Meritocratic Beliefs

In contrast with the economic self-interest theory, the system justification theory suggests that individuals' social status plays only a minor role in shaping their beliefs about economic justice. Instead, people with lower social status are expected to align their attitudes and beliefs with those of a higher social status (Lachmayer 1975; Newman, Johnston, and Lown 2015). This argument is supported by the general finding that there is little association between individuals' preferences about redistribution policies and their social status (Citrin, Reingold, and Green 1990; Fong 2001; Henry and Saul 2006; Margalit 2013; Robert 2003; Sears and Funk 1991). Barnes (2002) has

shown that regardless of sex, race or household income, urban respondents in the U.S. embrace the meritocratic belief that education and hard work are the keys to getting ahead.

The assumption of the system justification theory is that the desire to reduce the threat associated with uncertainty motivates both higher-status and lower-status individuals to view themselves, their groups, and the broader social system as fair and predictable (Lachmayer 1975; Steele 1988; van der Toorn, Tyler, and Jost 2011; Turner and Oakes 1986). Social stratification by definition offers certain groups a status higher than that of other groups. The motivation to regard the system as just is, of course, consistent with the life experiences and interests of people of higher status, but it conflicts with the life experience and interests of the system's disadvantaged groups (Walker, Jost, and Major 2003). Nevertheless, work by Brandt has shown that the disadvantaged are even more likely than members of advantaged groups to view the system as fair and just (Brandt 2013; Kersten 1975). This is also known as the status legitimacy hypothesis, according to which a lower status is associated with a greater tendency to perceive principles of economic justice as legitimate.

Why do members of low-status groups accept beliefs that justify their relative disadvantages? Two explanations for this apparent paradox have been proposed. According to McCoy, those of low status may benefit from holding meritocratic beliefs because such beliefs afford the perception of control over future outcomes, encouraging them to hope that they or their children will soon join a higher-status group (McCoy et al. 2013). Another explanation is that low-status individuals simply do not fully understand the role of merit in determining their situation, as this requires specific

knowledge and cognitive skills. They learn about the true determinants from their initial beliefs, their life experiences, and from others (Jaime-Castillo and Marqués-Perales 2014). Consequently, individuals with different initial beliefs interpret meritocratic principles in different ways. For instance, research shows that individuals with lower social status tend to systematically underestimate inequality (Evans 2004).

System justification theory predicts that disadvantaged social groups who experience more discrimination in the labor market, such as rural residents, females, the poor, and the less educated will be more likely to view society's current stratification as just, because this view gives them hope that they can improve their status in the future. That suggests a competing hypothesis:

H2: Individuals with less schooling tend to hold stronger meritocratic beliefs than those with more schooling.

Data, Measures and Estimation Strategy

Data

The data used in the paper were drawn from the first wave of the Chinese Family Panel Study, conducted in 2010 (CFPS 2010). The CFPSs are longitudinal surveys designed to monitor social changes by collecting a wide range of data (social, economic, education-related, health-related, and so forth) at individual, family, and community levels. The CFPS 2010, conducted by the Institute of Social Science at Peking University, is one of China's most recent nationally representative social surveys. It covered 14,960 households and 33,600 adults in 162 counties from 25 provinces (Xie

and Hu 2014). After a list-wise deletion of cases with missing values for the main variables used in our analysis, the sample size decreased from 33,600 to 26,936.

Measures

Belief in Meritocracy

The study's key construct was the strength of individuals' belief in meritocracy; that is, the belief that one can get ahead through intelligence, education, and hard work. A belief in meritocracy also implies a rejection of the opposing notion that individuals' socioeconomic success is largely determined by external forces such as luck, political connections, and family origin (Newman et al. 2015). Prior researchers have typically assessed individuals' beliefs in meritocracy by measuring their perceptions about the determinants of wealth and success—especially about the importance of education and effort in getting ahead (Newman et al. 2015). But such methods do not properly capture perceptions about the relative importance of meritocratic and non-meritocratic determinants. For example, some people may believe that merit and determinants unrelated to merit are equally important for socioeconomic attainment. Others may consider non-merit-based elements to be more important. A one-dimensional measure of meritocratic beliefs offers few insights into the strength of belief in meritocracy. That makes it necessary to introduce beliefs in elements unrelated to merit as a benchmark when determining beliefs about the relative influence of merit and other factors in determining socioeconomic success.

Following the lead of Reynolds and Xian (2014), we defined a variable quantifying individuals' beliefs in meritocracy based on four indicators of the relative roles of education and effort versus that of family origin. In the survey, the respondents had

been asked to rate the importance of a family's social status, its wealth, an individual's education, and his or her individual effort in achieving wealth and success. Each response was on a scale from 1 to 5, with 1 meaning "not important at all" and 5 meaning "very important." In this study, family social status and family wealth were treated as ascribed characteristics, and education and individual effort as achieved qualifications. A measure of belief in meritocracy was calculated by subtracting each respondent's ratings of the achieved qualifications from his or her ratings of the ascribed characteristics. A more straightforward assessment of the respondents' perceptions about the relative importance of merit and non-merit-related characteristics was also used as a robustness check. The respondents were also asked to give their opinions about the following statement: "In today's society, ability is more important than social connections (the Chinese term *guanxi*) in getting ahead." Those responses were also on a 5-point scale where 1 indicated "strongly disagree" and 5 indicated "strongly agree." In the analyses, the two measures were treated as continuous variables, but they were also recoded as binary outcomes and ordered variables as robustness checks.

Socioeconomic status

A respondent's socioeconomic status is considered a key predictor of his/her belief in meritocracy. It is measured using three indicators: years of schooling; household income per capita in 2009, and self-reported social status. In particular, we focus on the role of education in shaping beliefs in meritocracy.

Control variables

There were two sets of control variables. The first group comprised mainly demographic variables such as gender, age (and its square), ethnicity, type of household registration (urban or rural), marital status, and migrant status (living in a rural region with an urban household registration or vice versa). The second set comprised county fixed effects to capture regional variation in economic development and other regional characteristics that may have affected respondents' education and their meritocratic beliefs.

Table 1 provides a summary of the demographic profiles and the responses. In general, people who said they believe more strongly in meritocracy tended to be better educated and have a higher socioeconomic status.

[Table 1 about Here]

Estimations

The relationship between education and belief in meritocracy may be endogenous. For example, people who believe that individual education and hard work are important for success may invest more resources and effort in their own and their children's schooling. If so, any observed association between education and belief in meritocracy may operate in reverse. In addition, people's meritocratic beliefs and level of education may both be determined by omitted variables such as their parents' socioeconomic status or their county's level of economic development and its educational resources. To deal with any such endogeneity and to identify the causal relationship between education and beliefs about merit, we construct an instrumental variable controlling for differences

between provinces, using the dates of the effective implementation of the Compulsory Education law (CEL).

The Compulsory Education law was enacted on April 12, 1986 and was officially effective on July 1, 1986 (China Ministry of Education 1986; Fang et al. 2012). It made 9 years of education compulsory. Children were generally required to begin school at 6 or 7, and, in principle, compulsory education was to be free of charge. The law made it unlawful to employ children of compulsory school age (less than 16 years old). However, the law has been unevenly enforced depending on local economic development, educational resources, and so on. Provinces were allowed to implement the law on different effective dates. For instance, the regulation concerning 9 years of compulsory schooling was passed in Zhejiang in 1985, one year earlier than the national Compulsory Education Law. Most provinces passed province-level regulations governing compulsory schooling in 1986 or 1987, but some less developed provinces passed specific regulations about compulsory schooling in later years: 1991 for Hunan and 1994 for Tibet, for example. Figure 1 provides more details on the dates when different provinces introduced regulations governing compulsory schooling.

[Figure 1 about Here]

The law's staggered implementation offers the possibility of designing a natural experiment. We use the effective date of the law's implementation in the respondent's birth province to construct an instrumental variable predicting each individual's years of schooling. The assumption was that the longer respondents were exposed to compulsory education, the higher their educational attainment might be. The instrumental variable was a continuous variable indicating years of exposure to compulsory education

depending on the respondent's age and the law's effective date in his or her birth province. The instrumental variable's value was 15 if the respondent was born after the law's effective date, 0 if the respondent was already 16 when the law became effective in his or her birth province, and between 1 and 14 in other cases.

Note, however, that using this instrumental variable raises the concern that time trends may affect both individual educational attainment and meritocratic beliefs. Cohort trends at the province level and even at the county level were included as controls in the estimations to address this potential problem.

Results from OLS Estimation

Education and Meritocratic Beliefs

Are people who have received more schooling more likely to believe in meritocracy? As the market-oriented reform promotes the education-based meritocratic allocation of life chances, we predict that people with more years of education will be more likely to hold meritocratic beliefs than those with fewer years because they have benefited more from education-based selection practices.

Table 2 provides the results of OLS estimations predicting belief in meritocracy. The coefficients presented in column (1) show a significantly positive association between beliefs in meritocracy and respondents' years of education. In column (2), socio-demographic characteristics have been added to the model. The relationship remains significant and positive. In columns (3) and (4), two indicators of family socioeconomic status are included, and the significant positive relationship persists. The

model in column (5) also includes the county dummies; again, the relationship between education and meritocratic beliefs remains significant and positive.

[Table 2 about Here]

In terms of the magnitude, the column (5) model can serve as the baseline estimation. In general, higher-status people—those who are better educated, with higher household incomes and better self-reported social status—tend to hold stronger meritocratic beliefs than those of lower socioeconomic status. Education is particularly important. A one-year increase in schooling leads to a 0.051 increase in the belief in meritocracy, an increase of approximately 3 percent relative to the mean. In other words, all else being equal, the meritocratic beliefs of people with 9 years of compulsory education are 27 percent stronger than those of people with no schooling.

As for the control variables, the relationship between age and meritocratic beliefs appears to be U-shaped—younger and older people are more likely to hold stronger meritocratic beliefs than their middle-aged counterparts. Interestingly, more disadvantaged rural residents believe strongly that they can get ahead through education and hard work than do their urban counterparts.

Table 3 presents the results using different scales and measures. In columns (1) and (2), we use years of schooling to predict binary and ordered measures of overall meritocratic beliefs constructed from the four indicators. In column (3), we predict overall meritocratic beliefs computed by factor analysis. Column (4) shows the results of the alternative measure of belief in meritocracy, namely, the belief that ability is more important than social connections (*guanxi*) in socioeconomic success. Regardless of what measures are used, our main results remain unchanged. Together, the analyses

show that strength of belief in meritocracy is positively associated with schooling, and the relationship is robust.

[Table 3 about Here]

Heterogeneous Effects of Education on Meritocratic Beliefs

We now turn to examine how the effects of education on belief in meritocracy vary across different social groups. Table 4 presents results regarding the heterogeneous effects of education on meritocratic beliefs.

[Table 4 about Here]

In Column (1), by adding an interaction term between years of schooling and gender, we show gender difference in the effect of education on beliefs in meritocracy. The coefficients show that, conditional on education, females hold stronger meritocratic beliefs than males. All else being equal, the effect of education on meritocratic beliefs is 0.044 for males and 0.056 for females. This is consistent with Wu's belief that gender inequality in educational attainment has declined (Wu 2010) and that returns to education are greater for females than for males in today's China (Zhang et al. 2005).

Column (2) examines rural-urban disparity, measured by the interaction term between years of schooling and *hukou* type. It shows that the effect of education on meritocratic beliefs is greater for rural than for urban residents. When other variables are controlled for, the effect of education on meritocratic beliefs is 0.017 for urban residents but 0.066 for rural residents. This is consistent with the finding that rural residents express more positive attitudes toward existing inequalities than more advantaged urban citizens express (Whyte 2016).

Column (3) shows the heterogeneous effects of education on the meritocratic beliefs of people with different levels of household income. The effect of education on belief in meritocracy is significantly larger among lower-income individuals. In other words, holding education constant, people with lower incomes believe more strongly than those with higher incomes that education and hard work will enable them to get ahead.

Column (4) shows how economic development shapes public belief in meritocracy. The level of economic development has a significantly positive effect on individuals' meritocratic beliefs. People residing in counties with higher Gross Domestic Product (GDP) per capita express stronger meritocratic beliefs. However, the interaction term between years of schooling and county GDP per capita also implies that the marginal effect of education on meritocratic beliefs is significantly larger for people from less developed counties.

To summarize, these findings lend empirical support to the predictions of self-interest theory that people of higher socioeconomic status are more likely to support meritocratic principles. This inference is consistent with the previous finding that people with more education and higher incomes tend to hold stronger meritocratic beliefs, as reported in an international comparison (Kunovich and Slomczynski 2007) and in the U.S. (Reynolds and Xian 2014). At the same time, given the same level of education, females, rural residents, people with lower incomes, and people from less developed counties are more likely to perceive meritocracy as legitimate. This partly explains why Chinese citizens tolerate income gaps against the backdrop of a sharp rise in inequality (Whyte 2016; Wu 2009; Xie 2016).

Results from Instrumental-Variable Estimation

Is the association between education and meritocratic beliefs causal? As previously discussed, the observed relationships may be biased by omitted variables, measurement error, and/or reverse causality. An instrumental variable approach was applied to test for such biases.

Compulsory Education Law and Educational Attainment

The first issue is whether exposure to the Compulsory Education law predicts educational attainment. Table 5 shows that it does. Column (1) provides a baseline model in which the controls are age, gender, ethnicity, and residence type at 12 years old. The results suggest that exposure to the Compulsory Education law had a significant positive relationship with individuals' educational attainment. Columns (2) and (3) add controls for birth province and trends relevant to the birth province cohort. The basic relationship remains unchanged. In column (4), county and county-specific cohort trends are added, again with affecting the main results. This implies that the estimations are unlikely to be driven by cohort trends. In column (5), father's and mother's education are added. The effect of exposure to the Compulsory Education law is then much stronger than in column (4).

[Table 5 about Here]

The coefficients of column (4) can be used to assess the magnitude of the effect of exposure to the Compulsory Education law on individuals' educational attainment. Specifically, one additional year of exposure predicts an additional 0.05 years of

education. That is about 0.75 more years of schooling if an individual was born after the law became effective in his or her birth province, relative to those who were never affected by the law—an 11% increase.

Thus, the results shown in Table 5 indicate that implementation of the Compulsory Education law indeed increased Chinese people's average schooling, and that people who were subject to it for longer received more education.

Two-stage Least-squares (2SLS) Estimation of the Effect of Education on Meritocratic Beliefs

Table 6 reports the results of two-stage least-squares (2SLS) estimates of the influence of education on belief in the importance of ability for socioeconomic advancement. Columns (1) and (2) show the results of the OLS estimation and the 2SLS estimation respectively predicting overall belief in meritocracy. Columns (3) and (4) are similar models predicting an alternative measure of belief in meritocracy—the belief that ability is more important than social connections (*guanxi*) in getting ahead. Column (2) shows that the 2SLS result yields a much larger coefficient than the OLS estimation, and that pattern also holds true in columns (3) and (4). The much larger result of the 2SLS estimation suggests that years of exposure to the Compulsory Education law is not a strong instrumental variable governing respondents' schooling. OLS estimation is an effective way to quantify the magnitude of the effect of years of education on belief in meritocracy.

[Table 6 about Here]

In summary, these results provide evidence of a causal relationship between an individual's education and the strength of his or her belief in meritocracy. People with more years of schooling tend to believe that education and individual effort are more important than family origin in determining wealth and success.

Conclusions and Discussion

China has undergone tremendous economic, political, social, and cultural changes since 1978 which have affected Chinese people's life experiences in different ways. One major change has been in the way benefits and opportunities are distributed. A more market-oriented economy has, on the one hand, led to a rise in meritocracy. Education has become increasingly important in the allocation of socioeconomic rewards. On the other hand, elements unrelated to merit, such as family origin, institutional and structural barriers, and Communist Party membership in particular still strongly affect Chinese people's life chances. How do ordinary people reconcile these meritocratic and anti-meritocratic influences? How do they perceive the economy's current structure of inequality and mobility opportunities?

The analysis of representative nationwide data from the CFPS2010 has shown that better-educated people of higher social status tend to believe that education and hard work are more important than family origin for achieving wealth and success. Using regional and temporal variations in the implementation of China's Compulsory Education Law as an instrumental variable, we further confirm that education has a causal effect on meritocratic beliefs. Further analysis suggests that the effects of education on meritocratic perceptions are stronger for relatively disadvantaged groups.

Specifically, given the same level of education, females, rural residents, people with lower incomes, and people from less developed counties are more likely to believe in meritocracy than their more advantaged counterparts.

These findings have clear implications for the legitimization of social stratification and for social stability in China, where income inequality is rising quickly. The economy's Gini coefficient is estimated to have been 0.33 in 1980, but had risen to about 0.45 by 2012 (Xie and Zhou 2014). With China's history of socialist egalitarianism, many observers are concerned that the sharp rise in income inequality may bring widespread social discontent and threaten political stability in China.

Surprisingly, the evidence suggests that Chinese citizens were quite tolerant of income inequality, at least in 2010. One hypothesis is that most Chinese people regard talent, education, and hard work as the primary routes to economic success in the reform era (Whyte 2016; Wu 2009; Xie 2016). That hypothesis is widely accepted, but few rigorous empirical studies have been conducted examining people's belief in meritocracy and its determinants. Our findings shed light on these issues, showing the role of education in shaping Chinese people's meritocratic belief that socioeconomic success is tied more closely to education and hard work than to family origins.

These findings contribute to scholarly understanding of the relationship between socioeconomic status and justice perceptions by identifying a causal link between education and belief in meritocracy. They empirically support self-interest theory. People of higher socioeconomic status are more likely to support meritocracy than those with of lower status. But our findings also support the seemingly contradictory status-legitimacy hypothesis. Education has a greater effect on meritocratic beliefs among the

disadvantaged. This may be because such beliefs give the relatively disadvantaged a sense of more control over their future success.

Some important questions remain open for further investigation. It would be very helpful to devise a measure that can distinguish a descriptive from a prescriptive belief in meritocracy, distinguishing beliefs about what is from beliefs about what should be (Narita and Manire 1976). Future studies might also fruitfully explore how contextual factors such as income inequality and social practices interact with individuals' social positions and life experiences to shape their beliefs. In addition, future studies might usefully focus on how meritocratic beliefs shape public attitudes toward inequality and preferences about redistribution policies.

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Table 1. Summary Statistics for Selected Variables Sorted by Belief in Meritocracy

Variables used	Total sample	Don't believe	Believe	Difference
Value family status	3.117 (1.072)	3.944 (0.544)	2.554 (0.972)	1.391*** (0.010)
Value family wealth	2.876 (1.069)	3.823 (0.682)	2.231 (0.759)	1.592*** (0.009)
Value individual education	3.769 (0.797)	3.630 (0.816)	3.864 (0.770)	-0.234*** (0.009)
Value hard work	3.916 (0.647)	3.687 (0.749)	4.071 (0.513)	-0.384*** (0.007)
Belief in meritocracy ^a	1.693 (2.160)	-0.450 (0.986)	3.151 (1.390)	-3.600*** (0.015)
Belief in ability	2.449 (0.976)	2.261 (0.830)	2.576 (1.044)	-0.315*** (0.012)
Years of education	6.871 (4.854)	5.852 (4.937)	7.565 (4.672)	-0.297*** (0.013)
Years exposed to CEL	3.541 (5.630)	2.654 (4.980)	4.145 (5.957)	-1.491*** (0.066)
Logged household income	8.686 (1.072)	8.583 (1.116)	8.757 (1.036)	-0.173*** (0.013)
Social status	2.760 (0.961)	2.702 (0.995)	2.800 (0.936)	-0.098*** (0.011)
Urban <i>hukou</i>	0.317 (0.465)	0.299 (0.458)	0.329 (0.470)	-0.030*** (0.0060)
Urban <i>hukou</i> at age 12	0.181 (0.385)	0.176 (0.381)	0.185 (0.388)	-0.009* (0.005)
Migrants	0.077 (0.267)	0.070 (0.255)	0.082 (0.274)	-0.012*** (0.003)
Married	0.795 (0.404)	0.820 (0.384)	0.778 (0.415)	0.042*** (0.005)
Male	0.507 (0.500)	0.501 (0.500)	0.511 (0.500)	-0.009 (0.006)
Age	44.13 (16.09)	46.95 (15.55)	42.21 (16.16)	4.747*** (0.188)
Han	0.926 (0.262)	0.917 (0.276)	0.932 (0.252)	-0.015*** (0.003)
Percentage	100.00	40.27	59.73	
Observations	26,936	10,846	16,090	

Notes: a: Belief in meritocracy is a continuous variable computed by deducting scores on family factors (value family social status and family wealth from scores on individual factors (value education and effort). b: standard deviations /errors in parentheses. *** indicates significance at the $p \leq 0.001$ (** $p \leq 0.01$, * $p \leq 0.05$) level of confidence.

Table 2. Coefficients of OLS Estimations Predicting Belief in Meritocracy

	(1)	(2)	(3)	(4)	(5)
Years of Education	0.065*** (0.004)	0.059*** (0.004)	0.055*** (0.005)	0.053*** (0.005)	0.051*** (0.004)
Logged household income			0.061** (0.020)	0.048* (0.021)	0.060*** (0.017)
Subjective status				0.152*** (0.019)	0.146*** (0.017)
Urban <i>hukou</i>		-0.239*** (0.053)	-0.275*** (0.054)	-0.228*** (0.054)	-0.108* (0.042)
Migrants		-0.052 (0.063)	-0.078 (0.063)	-0.042 (0.064)	0.037 (0.061)
Married (yes=1)		0.134** (0.044)	0.131** (0.044)	0.110* (0.044)	0.112** (0.042)
Male		-0.033 (0.025)	-0.029 (0.025)	-0.028 (0.025)	-0.036 (0.025)
Age		-0.069*** (0.006)	-0.070*** (0.005)	-0.069*** (0.005)	-0.069*** (0.005)
Age ²		0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Ethnicity (Han=1)		0.242** (0.093)	0.231* (0.092)	0.251** (0.092)	-0.133 (0.081)
Country Dummies	NO	NO	NO	NO	YES
Constant	1.255*** (0.044)	2.757*** (0.156)	2.297*** (0.226)	1.984*** (0.224)	2.923*** (0.235)
Observations	26,936	26,936	26,936	26,936	26,936
R-squared	0.021	0.038	0.038	0.043	0.097

Notes: Robust standard errors (clustered at the community level) in parentheses. *** indicates significance at the $p \leq 0.001$ (** $p \leq 0.01$, * $p \leq 0.05$) level of confidence.

**Table 3. Coefficients of OLS Models Predicting
Belief in Meritocracy (Different Scales)**

	(1)	(2)	(3)	(4)
	binary	ordered	factors	ability
Years of education	0.056*** (0.004)	0.048*** (0.004)	0.023*** (0.002)	0.007*** (0.002)
Logged household income	0.069*** (0.019)	0.058*** (0.017)	0.025** (0.008)	-0.016* (0.007)
Subjective status	0.118*** (0.018)	0.124*** (0.016)	0.064*** (0.008)	0.021** (0.007)
Urban <i>hukou</i>	-0.054 (0.046)	-0.080 (0.043)	-0.040* (0.019)	-0.001 (0.022)
Migrants	0.048 (0.061)	0.051 (0.059)	0.030 (0.026)	0.027 (0.026)
Married (yes=1)	-0.067 (0.036)	-0.087* (0.034)	-0.071*** (0.016)	-0.045** (0.016)
Male	-0.023 (0.025)	-0.041 (0.024)	-0.024* (0.011)	-0.028* (0.012)
Age	-0.012*** (0.001)	-0.010*** (0.001)	-0.006*** (0.000)	0.001 (0.001)
Ethnicity (Han=1)	-0.205* (0.097)	-0.185* (0.088)	-0.064 (0.036)	-0.047 (0.037)
Constant cut1		-2.706*** (0.191)		
Constant cut2		-0.676*** (0.189)		
County dummies	YES	YES	YES	YES
Constant	0.598** (0.215)		0.170 (0.104)	2.452*** (0.098)
Observations	26,936	26,936	26,936	26,936
R-squared			0.098	0.037
Country FE	YES	YES	YES	YES
Pseudo R ²	0.071	0.047		

Notes: Robust standard errors (clustered at the community level) are shown in parentheses.

*** indicates significance at the $p \leq 0.001$ (** $p \leq 0.01$, * $p \leq 0.05$) level of confidence.

Table 4. The Heterogeneous Effects of Education on Beliefs in Meritocracy (OLS)

	(1)	(2)	(4)	(5)
Education(E)	0.056*** (0.005)	0.066*** (0.005)	0.224*** (0.025)	0.350*** (0.040)
Male	0.043 (0.037)	-0.044 (0.025)	-0.040 (0.025)	-0.043 (0.025)
Urban <i>hukou</i>	-0.107* (0.042)	0.307*** (0.075)	-0.083 (0.043)	-0.185*** (0.054)
Migrants	0.062 (0.060)	0.057 (0.060)	0.069 (0.060)	0.034 (0.063)
Logged household income	0.056** (0.017)	0.056** (0.017)	0.182*** (0.024)	0.060** (0.022)
Subjective status	0.151*** (0.017)	0.154*** (0.017)	0.154*** (0.017)	0.158*** (0.019)
GDP Per Capita				0.161*** (0.045)
Interactions				
Male*E	-0.012* (0.005)			
Urban <i>hukou</i> *E		-0.049*** (0.007)		
Household income*E			-0.020*** (0.003)	
GDP per capita*E				-0.029*** (0.004)
Married	-0.149*** (0.035)	-0.139*** (0.035)	-0.145*** (0.035)	-0.145*** (0.037)
Age	-0.011*** (0.001)	-0.012*** (0.001)	-0.011*** (0.001)	-0.013*** (0.001)
Ethnicity (Han=1)	-0.139 (0.081)	-0.138 (0.082)	-0.149 (0.081)	0.189* (0.091)
Country dummies	YES	YES	YES	YES
Constant	1.919*** (0.228)	1.887*** (0.226)	0.861** (0.265)	-0.621 (0.443)
Observations	26,936	26,936	26,936	26,575
R-squared	0.092	0.094	0.094	0.043

Notes Robust standard errors (clustered at the community level) in parentheses;

*** indicates significance at the $p \leq 0.001$ (** $p \leq 0.01$, * $p \leq 0.05$) level of confidence.

Table 5. The Effects of Compulsory Education Law on Education (OLS)

	(1)	(2)	(3)	(4)	(5)
Years exposed to CEL	0.070*** (0.016)	0.047** (0.015)	0.051*** (0.015)	0.055*** (0.014)	0.137*** (0.022)
Male	1.256*** (0.058)	1.262*** (0.057)	1.266*** (0.057)	1.326*** (0.055)	0.651*** (0.072)
Age	- 0.103*** (0.004)	- 0.111*** (0.004)	-0.064** (0.021)	- 0.160*** (0.020)	- 0.155*** (0.039)
Ethnicity(Han=1)	1.581*** (0.361)	0.903** (0.313)	0.864** (0.297)	0.266 (0.234)	0.371 (0.275)
Urban hukou at age 12	4.406*** (0.132)	3.932*** (0.124)	3.940*** (0.124)	3.046*** (0.112)	1.718*** (0.107)
Father's education					0.179*** (0.010)
Mother's education					0.135*** (0.010)
Province dummies	NO	YES	YES	NO	NO
Province*Age Trend	NO	NO	YES	NO	NO
County dummies	NO	NO	NO	YES	YES
County*Age Trend	NO	NO	NO	YES	YES
Constant	8.383*** (0.422)	11.458** (0.482) *	9.246*** (1.166)	10.744** (1.043) *	8.536*** (1.357)
Observations	26,936	26,880	26,880	26,936	10,513
R-squared	0.292	0.322	0.326	0.396	0.425

Notes: Robust standard errors in parentheses (cluster at community level); *** p<0.001, ** <0.01, * p<0.05.

**Table 6. Two-stage IV Estimation of the Relationship
between Education and Belief in Meritocracy**

	Belief in meritocracy		Belief in ability	
	(1)	(2)	(3)	(4)
	OLS	2SLS	OLS	2SLS
Years of education	0.052*** (0.004)	0.422** (0.153)	0.008*** (0.002)	0.180* (0.073)
Logged household income	0.054** (0.017)	-0.212 (0.113)	-0.017* (0.007)	-0.141** (0.054)
Subjective social status	0.156*** (0.017)	0.055 (0.045)	0.022** (0.007)	-0.025 (0.021)
Urban hukou	-0.125** (0.042)	-1.373** (0.520)	-0.007 (0.022)	-0.588* (0.249)
Married	0.133* (0.061)	0.167* (0.077)	0.056* (0.028)	0.072* (0.035)
Male	-0.132*** (0.036)	-0.101* (0.044)	-0.038* (0.016)	-0.024 (0.020)
Age	-0.025 (0.025)	-0.490* (0.193)	-0.026* (0.012)	-0.243** (0.092)
Han	-0.143 (0.083)	-0.225 (0.120)	-0.046 (0.038)	-0.084 (0.060)
County dummies	YES	YES	YES	YES
County*Age Trend	YES	YES	YES	YES
Constant	1.997*** (0.557)	0.615 (0.713)	2.974*** (0.271)	2.331*** (0.508)
First stage				
Years exposed to CEL		0.040*** (0.010)		0.040*** (0.010)
Weak IV(F)		15.351		15.351
R-squared	0.105		0.050	
Observations	26,936	26,936	26,936	26,936

Notes: Robust standard errors (cluster at the community level) in parentheses; *** indicates significance at the $p \leq 0.001$ (** $p \leq 0.01$, * $p \leq 0.05$) level of confidence.

Figure 1. The Year Education became Compulsory by Province