

An analysis of the influence of parents' education level and work status on their children's education level and work status

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Abstract:

The influence of parent's education level and working conditions on their offspring is a long-lasting topic in the field of economics research. Academic circles have conducted extensive research on intergenerational mobility, but few studies systematically discuss the influence of parents' education level and working conditions on their offspring. This paper mainly focuses on the relationship between the father's education level, job level, whether he works in the system and whether he works in a foreign-funded enterprise and his offspring's English ability, education background, management work, and income level, and makes an empirical analysis by using quantitative research methods. The research results of this paper have formed a positive and beneficial supplement to the research in the field of intergenerational mobility.

Keywords: education level; Work; Intergenerational mobility.

1. Introduction

In the process of discussing social mobility and intergenerational inheritance, the influence of parent's education level and working conditions on their children is a topic that cannot be ignored. This issue is not only related to the development of individuals but also profoundly affects the fairness and progress of society. This paper aims to reveal the far-reaching influence of family background on the next generation by analyzing how the educational background and working conditions of the fathers affect the educational level and career development of the children. Academic circles have conducted extensive research on intergenerational mobility, especially the influence

of parents' education level and working conditions on their children. For example, "Will the education level of parents affect the relative poverty of their children?" found that the higher the education level of parents, the lower the possibility of their children falling into relative poverty. This shows that parents with higher education levels can provide more resources and support for their children, thus reducing the intergenerational transmission of poverty (Zhao Hongxia & Zack Zhang & Yao Xiudian, 2024). As mentioned in "Intergenerational Inheritance and Mobility of Occupation: An Empirical Analysis Based on the Census Data of China", the intergenerational mobility of occupation in China has shown a significant upward trend in recent decades. For example, 20.8%

of the workers born in 1980-1989 entered an occupational level higher than their fathers, while only 11.5% of the workers born in 1950-1959 showed an improvement in occupational mobility (Zhu Chen, 2017). James Heckman, winner of the Nobel Prize in Economics, also pointed out that children from different family backgrounds have significant differences in skills training, academic performance, no criminal record, years of education, or income level. Children of mothers with higher education always perform better than those of mothers with lower education, which reveals the far-reaching influence of education level on their offspring (James Heckman, 2024). Together, these cases prove that the education and work conditions of parents have a significant impact on the education and career development of their children, and reveal the complexity of social mobility and intergenerational equity. Through these empirical studies, we can have a deeper understanding of how family background shapes the life trajectory of the next generation, and provide a basis for formulating relevant policies.

This paper mainly discusses the influence of parents' education level and working conditions on their children's education level and working conditions. In terms of research methods, this paper will specifically analyze the influence of fathers' education level, father's level, whether their father is in the system or not, and whether their father works in a foreign-funded enterprise on their English ability, education, whether they are engaged in management work and income level. It is found that the father's education level has a significant positive impact on his offspring's English ability, education background, and whether they are engaged in management, but has no significant positive impact on their income level. The father's job level has a significant positive impact on his offspring's English ability, and education, whether they are engaged in management work and income level; Whether the father works in the system has a significant positive impact on the English ability, education and management of the offspring; Father's work in a foreign-funded enterprise has a significant positive impact on his offspring's English ability and academic qualifications, but there is no significant positive impact on their management and income level.

2. Literature review and research hypothesis

2.1 The impact of the father's education level on his offspring

A father's education level has a far-reaching impact on the

development of his offspring in many aspects.

2.1.1 The father's education level and the English ability of his offspring.

Investigations reveal that fathers who possess advanced degrees tend to prioritize their offspring's linguistic development, particularly in enhancing English skills (Holmlund et al., 2011). They are often more disposed towards facilitating additional English learning avenues for their children, such as enrolling them in supplementary English courses or hiring private tutors, aiming to elevate their English proficiency (Machin & Vignoles, 2004).

2.1.2 The education level of the father and the education level of the offspring.

Research indicates a positive link between a father's educational attainment and the likelihood of his children pursuing higher education (Checchi & Peragine, 2010). This might stem from the fact that highly educated fathers are more prone to offering educational resources and serving as exemplary figures for their children (Ferreira & Gignoux, 2014). Furthermore, the educational level of the father influences the family's capacity to invest in education, thereby influencing their children's educational prospects (Hertz et al., 2007).

2.1.3 The father's education level and whether the children are engaged in management.

Research underscores that fathers with superior education are more likely to share management expertise with their children, thus augmenting the likelihood of their children entering management careers (Kong & Golley, 2013). Additionally, a father's social connections and professional standing can open up additional management opportunities for his children (Lauer, 2003).

2.1.4 The education level of the father and the income level of the offspring.

Studies indicate that the number of years a father has spent in education positively influences the initial salary of his graduates (Yue Changjun et al., 2004). As a father's educational attainment rises, he tends to allocate more resources towards his children's education and spends more quality time engaging with them, ultimately enhancing their academic performance and future earnings (Qi Xiang, 2013). Furthermore, a father's level of education can shape his children's income potential by guiding their career decisions and influencing the availability of job opportunities (Chevalier & Lanot, 2002).

H1-H4: The father's education level has a significant positive impact on his offspring's English ability, education, engaged in management work, income.

2.2 The impact of the father's work on his offspring

Father's work, including his administrative level, whether he works in the system, and whether he works in a foreign-funded enterprise, has an important influence on the development of his offspring. This paper summarizes the relevant literature and discusses how the father's work situation affects the above variables. These factors are not only related to the quality of life of individuals but also of great significance to social economic development and educational equity.

2.2.1 Father's work situation and English ability of his offspring

Investigations reveal that fathers employed within formal sectors are more inclined to offer supplementary English learning materials and resources to their children, such as enrolling them in English tutoring programs or hiring private instructors, to enhance their English language skills (Hout & Rosen, 2000). Moreover, the working environment of foreign-funded enterprises typically demands proficient English communication abilities, prompting fathers in such settings to prioritize their children's English education (Long & Ferrie, 2013).

2.2.2 The father's work and the education of his children.

Research suggests that fathers who are gainfully employed within formal sectors are more likely to provide educational resources and serve as exemplary figures for their children (Golley & Kong, 2013). Furthermore, a father's professional network and standing can offer additional educational avenues for his children (Munshi, 2011).

2.2.3 The father's work and whether the children are engaged in management.

Studies indicate that fathers employed within formal sectors are more prone to sharing management expertise with their children, thereby increasing the likelihood of their offspring pursuing careers in management (Doherty et al., 1998). Additionally, a father's professional connections and status can open up additional management opportunities for his children (Lauer, 2003).

2.2.4 The father's work and the income level of his offspring.

Research underscores that a father's socioeconomic standing significantly influences his children's occupational advancement, particularly during their initial entry into the workforce. Children of high-income fathers have higher income levels and faster income growth after entering the labor market. In addition, the nature of the father's work unit also affects the income level of his offspring. It is also found that in the early stage of the offspring's career, the father's income has a positive causal impact on the offspring's income, and the intergenerational income elasticity is generally low, which means that the income mobility in the Ming Dynasty is relatively large (Lin Xiangsen & Zhou Yuwen, 2019).

To sum up, the father's work situation has a significant impact on his offspring's English ability, education, whether they are engaged in management work, and income level. These influences play a role through various mechanisms, including family environment, investment in educational resources, social networks, and career opportunities.

H5: The father's job level has a significant positive impact on his offspring's English ability, educational background, whether they are engaged in management, and income level.

H6: Whether the father works in the system has a significant positive impact on the English ability, education, management, and income level of the offspring.

H7: Whether the father works in a foreign-funded enterprise has a significant positive impact on the English ability, education, management, and income level of the offspring.

3. Variable measurement

3.1 Variable measurement

The core independent variables of this paper include the father's education level, the father's administrative level, whether his father is in the system, and whether his father works in a foreign-funded enterprise.

The core dependent variables of this paper include the English ability, educational background, management work, and income level of the offspring.

The control variables in this paper include the sex, age, nationality, household registration type, and political outlook of the offspring.

Table 1 Variable measurement

Variable type	Variable name	Measurement topic	measure
Dependent variable	English Ability	A52. What do you think is your ability to speak English?	1- 5
	Academic Degree	A7a. What is your highest education level at present?	0completely uneducated-20Graduate or above
	Are you engaged in management work?	A59f. In your current job, what are your management activities?	1- neither managing others nor being managed by others. 2- Only managed by others, not managed by others 3- Manage others and be managed by others. 4- Take care of others, not be managed by others.
	Income Level	A8a. What was your total personal income/ total labor or professional income last year?	continuous variable
Independent Variable	Father’s Education Level	A89b. What is your father’s highest education level?	0completely uneducated-20Graduate or above
	Father’s Job Rank	A89f. When you were 14 years old, if your father held an administrative post, his post level was:	1No Level-7Deputy Director and above
	Is the father within the system	A89g: When you were 14 years old, what was the unit type of the company or company where your father worked?	0- Non-institutional 1- Within the system
	Is father in a foreign-funded enterprise?	A89h. When you were 14 years old, the ownership of the unit or company where your father worked was:	0- Non-foreign-funded enterprises 1- Foreign-funded enterprises
Control Variable	Gender	A2. Gender	0- Female 1- Male
	Age	A3. What’s your date of birth?	continuous variable
	Nation	A4. What is your nationality?	0- minority nationalities 1- Han nationality
	Location of Household Registration	A18. Type of community where the interviewee lives:	0- rural areas 1- City
	Political Status	A10. The current political situation is:	0 or 1

3.2 Descriptive statistics

Table 2 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
English ability	11924	1.424	77	one	five
academic degree	11924	9.295	4.352	0	twenty
Are you engaged in management work?	11924	784	1.146	0	four
income level	11924	41046.236	192668.86	0	9950000

Father's education level	11924	1.954	3.552	0	13
Father's job rank	11924	1.103	6	one	seven
Is the father within the system	11924	102	303	0	one
Is father in a foreign-funded enterprise?	11924	002	046	0	one
gender	11924	469	499	0	one
age	11924	52.205	16.844	18	118
nation	11924	929	258	0	one
Location of household registration	11924	1.784	1.044	one	four
Political status	11924	113	317	0	one

4. Regression results

Table 3 the influence of father's education level on his offspring

	M1	M2	M3	M4
	English ability	academic degree	Are you engaged in management work?	income level
Father's education level	0.00452*** (2.73)	0.0275*** (3.24)	0.00575** (2.27)	55.54 (0.11)
gender	-0.0604*** (-5.07)	0.709*** (11.62)	0.293*** (16.10)	22557.0*** (6.36)
age	-0.0230*** (-65.29)	-0.133*** (-73.87)	-0.0329*** (-61.22)	-875.7*** (-8.36)
nation	0.0864*** (3.76)	0.528*** (4.49)	0.245*** (6.98)	14011.2** (2.05)
Location of household registration	0.162*** (28.03)	1.391*** (46.94)	0.126*** (14.26)	13588.1*** (7.89)
Political status	0.330*** (17.15)	3.232*** (32.83)	0.348*** (11.87)	20179.8*** (3.53)
constant term	2.237*** (75.07)	12.52*** (82.12)	1.862*** (40.95)	36549.2*** (4.13)
N	11924	11924	11924	11924
R2	0.30	0.43	0.27	0.02
adj. R2	0.30	0.43	0.27	0.02

* p < 0.1, ** p < 0.05, *** p < 0.01

From Model 1 to 4, it can be considered that the father's education level has a significant positive influence on offspring's English ability, education, engaged in management work, income.

Table 4 Influence of Father’s Job Grade on Children

	M5	M6	M7	M8
	English ability	academic degree	Are you engaged in management work?	income level
Father’s job rank	0.0823*** (8.30)	0.633*** (12.53)	0.0657*** (4.34)	6147.8** (2.08)
gender	-0.0613*** (-5.15)	0.702*** (11.58)	0.292*** (16.07)	22491.2*** (6.34)
age	-0.0230*** (-65.40)	-0.133*** (-74.20)	-0.0329*** (-61.24)	-872.6*** (-8.34)
nation	0.0853*** (3.72)	0.520*** (4.45)	0.244*** (6.96)	13951.2** (2.04)
Location of household registration	0.157*** (26.93)	1.348*** (45.41)	0.122*** (13.68)	13140.3*** (7.58)
Political status	0.319*** (16.58)	3.147*** (32.09)	0.340*** (11.55)	19347.7*** (3.38)
constant term	2.166*** (69.75)	11.97*** (75.55)	1.810*** (38.12)	30694.9*** (3.32)
N	11924	11924	11924	11924
R2	0.31	0.44	0.27	0.02
adj. R2	0.31	0.44	0.27	0.02

* p < 0.1, ** p < 0.05, *** p < 0.01

From the results of Model 5, it can be considered that father’s job level has a significant positive influence on their offspring’s English ability, and every time father’s job level is increased by one unit, their English ability will be increased by 0.0823 units.

From the results of Model 6, it can be considered that the father’s job rank has a significant positive influence on his offspring’s education. Every time a father’s job rank is increased by one unit, his offspring’s education will be increased by 0.633 units.

From the results of Model 7, it can be considered that the

father’s job level has a significant positive influence on his offspring’s management work. Every time the father’s job level is increased by one unit, the probability of his offspring’s management work will be increased by 0.0657 units.

According to the results of Model 8, it can be considered that the father’s job rank has a significant positive impact on the income level of the offspring, and the income level of the offspring will increase by 6147.8 units for every unit of the father’s job rank.

Table 5 the influence of whether the father is in the system on the offspring

	M9	M10	M11	M12
	English ability	academic degree	Are you engaged in management work?	income level
Does the father work in the system	0.203*** (10.25)	1.569*** (15.53)	0.135*** (4.43)	5655.4 (0.95)
gender	-0.0610*** (-5.13)	0.705*** (11.66)	0.293*** (16.09)	22542.6*** (6.36)

age	-0.0228*** (-65.04)	-0.132*** (-73.80)	-0.0328*** (-61.02)	-871.0*** (-8.31)
nation	0.0845*** (3.69)	0.513*** (4.40)	0.243*** (6.94)	13961.7** (2.04)
Location of household registration	0.151*** (25.74)	1.305*** (43.64)	0.119*** (13.22)	13271.8*** (7.57)
Political status	0.318*** (16.56)	3.140*** (32.14)	0.341*** (11.59)	19844.7*** (3.46)
constant term	2.240*** (75.95)	12.53*** (83.49)	1.870*** (41.41)	36488.9*** (4.15)
N	11924	11924	11924	11924
R2	0.31	0.44	0.27	0.02
adj. R2	0.31	0.44	0.27	0.02

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

From the results of Model 9, it can be considered that whether the father works in the system has a significant positive influence on the English ability of the offspring, and the English level of the offspring whose father works in the system is 0.203 units higher than that of the offspring whose father does not work in the system.

From the results of model 10, it can be considered that the father's job level has a significant positive impact on the education of the offspring, and the offspring whose father works in the system are 0.203 units higher than those whose father does not. The educational background of the offspring whose father works in the system is 0.203 units

higher than that of the offspring whose father does not work in the system.

From the results of model 11, it can be considered that whether the father works in the system has a significant positive influence on the management of the offspring, and the probability of the offspring whose father works in the system is 0.135 units higher than that of the offspring whose father does not work in the system.

From the results of model 12, it can be considered that whether the father works in the system has no significant influence on the income level of the offspring.

Table 6 the influence of whether the father is in the system on the offspring

	M13	M14	M15	M16
	English ability	academic degree	Are you engaged in management work?	income level
Does father work in a foreign-funded enterprise?	0.696*** (5.40)	3.083*** (4.67)	0.303 (1.54)	46480.1 (1.21)
gender	-0.0604*** (-5.07)	0.709*** (11.63)	0.293*** (16.10)	22559.7*** (6.36)
age	-0.0229*** (-65.11)	-0.133*** (-73.70)	-0.0329*** (-61.14)	-870.1*** (-8.30)
nation	0.0847*** (3.69)	0.520*** (4.42)	0.244*** (6.95)	13916.8** (2.04)
Location of household registration	0.162*** (28.00)	1.391*** (46.94)	0.126*** (14.28)	13536.4*** (7.86)
Political status	0.329***	3.231***	0.348***	20142.8***

	(17.14)	(32.83)	(11.87)	(3.52)
constant term	2.243***	12.57***	1.872***	36452.4***
	(75.82)	(82.96)	(41.44)	(4.14)
<i>N</i>	11924	11924	11924	11924
<i>R</i> ²	0.30	0.43	0.27	0.02
adj. <i>R</i> ²	0.30	0.43	0.27	0.02

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

From the results of Model 13, it can be considered that the father works in a foreign-funded enterprise has a significant positive influence on the English ability of the offspring, and the English level of the offspring whose father works in a foreign-funded enterprise is 0.696 units higher than that of the offspring whose father does not work in a foreign-funded enterprise.

From the results of Model 14, it can be considered that the father's work in a foreign-funded enterprise has a significant positive, and the education of the offspring whose father works in a foreign-funded enterprise is 3.083 units higher than that of the offspring whose father does not work in a foreign-funded enterprise.

From the results of model 15, so it can be considered that whether the father works in a foreign-funded enterprise has no significant influence on whether the offspring are engaged in management.

From the results of model 16, it can be considered that whether the father works in a foreign-funded enterprise has no significant influence on the income level of the offspring.

5. Conclusion

This paper finds that the father's education level has a significant positive impact on his offspring's English ability, educational background, and whether they are engaged in management work, but has no significant positive impact on their income level; Father's job level has a significant positive impact on his offspring's English ability, education, whether they are engaged in management work and income level; Whether the father works in the system has a significant positive impact on the English ability, education, and management of the offspring, but has no significant positive impact on the income level of the offspring. These research conclusions have certain reference significance for understanding intergenerational mobility.

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