

Research on Factors Influencing Decision-Making About Pursuing Postgraduate Education Among Chinese Graduates with Work Experience

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ABSTRACT

In recent years, the rapid expansion of postgraduate enrolment in higher educational institutions (HEIs) in China has stimulated graduates to pursue postgraduate education after obtaining several years of work experience. This paper investigated the factors that influence this group of students' decision-making about enrolling for postgraduate studies by applying regression analysis. Based on the three influencing factors identified, namely Academic Performance Satisfaction (APS), Satisfaction of Major (SM), and Family Support (FS), a theoretical model of postgraduate decision-making was developed. This study also proposed practical suggestions for HEIs, postgraduate students, and their families.

Keywords: pursuing postgraduate education, Chinese graduates, decision-making, work experience

1. INTRODUCTION

College graduates' career choice is of critical importance and has been extensively researched. Scholars have identified environmental factors including family, school counsellors, teachers, friends and government [1], as well as social and psychological factors significantly influencing graduates' career choice, which acts as a fundamental basis for their future standard of living [2]. It was reported that working adults with higher educational levels received higher income, and that the level of education and income, in turn, impacted their decision about pursuing postgraduate education. While universities in the western world tend to examine applicants' previous work experience as part of entry qualification [3], the vast majority of postgraduate students in Chinese HEIs do not have any work experience and pursue postgraduate studies right after college graduation [4]. However, this situation is experiencing some changes. According to the National Bureau of Statistics of China (NBSC, 2021), the number of enrolled postgraduate students skyrocketed from 191,1406 in 2015 to 313,9598 in 2021 [5]. Among those enrolled, an increasing fraction of them had obtained several years of work experience before they applied for postgraduate studies. The key factors influencing this group of students' choice of pursuing postgraduate education are still to be investigated. Previous literature indicated that the main motivation factors for entering higher education included opportunities for career growth and financial welling, as well as the development of study skills, knowledge, and abilities [6]. Other reasons for pursuing master or doctoral education after work include the aspiration for knowledge and lifelong learning [7].

Nevertheless, there is a paucity of research exploring factors that affect the decision-making about pursuing postgraduate studies among Chinese graduates with work experience. Therefore, this study aims to fill the research gap by investigating these key factors through regression analysis. After data verification and analysis, we proposed a theoretical model of postgraduate students' educational decision-making and provided suggestions for these students, their families and HEIs.

2. THEORETICAL FRAMEWORK & HYPOTHESE

2.1. Framework

Previous studies have found that family condition, school counsellors, subject disciplines, government policy, individual's perception, cognition, and beliefs had a significant influence on people's career choice [1][8][9]. In this paper, students' Postgraduate Education Decision (PED), a kind of career choice, is regarded as the dependent variable, which is hypothesized to be impacted by five independent variables (Academic Characteristics, Undergraduate Satisfaction, Social Relationship, Family Supporting and Education Importance). The relationship is represented by the conceptual framework in Fig. 1. (See Fig. 1 in the next page)

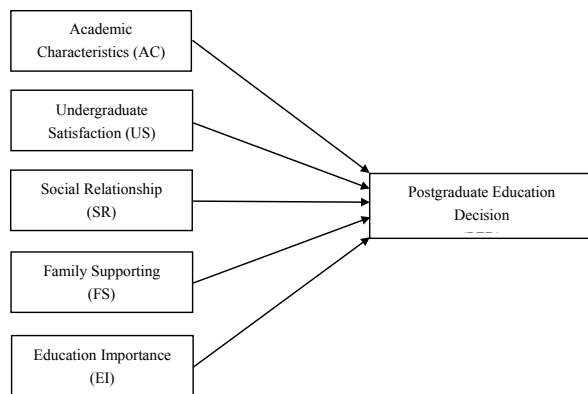


Figure 1. Factors influencing further education of postgraduates

2.2. Hypotheses

H1: Academic Characteristics (AC) significantly influence Postgraduate Education Decision (PED) among Chinese students with work experience.

H2: Undergraduate Satisfaction (US) has significant influences on Postgraduate Education Decision (PED).

H3: Social Relationship (SR) influences Postgraduate Education Decision (PED).

H4: Family Supporting (FS) has positive and significant influences on Postgraduate Education Decision (PED).

H5: Education Importance (EI) directly influences Postgraduate Education Decision (PED).

3. METHODOLOGY

Employing a quantitative research design, the present study collected its data through questionnaire surveys, following the research method tradition in this field of research [8][10][11]. There is only one dependent variable in this research that is whether to return HEIs to pursue a master or doctoral degree, namely Postgraduate Education Decision (PED). Considering the situation of Chinese postgraduates, this study employs 18 independent variables divided into 6 classes. 1) Academic characteristics: learning ability, learning interest and academic performance satisfaction; 2) Satisfaction of undergraduate study: satisfaction of major and satisfaction of ability; 3) Social relationship: employment assistance and family condition; 4) Family support: economic support and mental support; 5) Importance of education: role of diploma, promotion opportunity and salary; 6) Demographic characteristics. We constructed the questionnaire containing 18 questions measuring the above variables, which was then released by a professional survey website in China named “So Jump”.

very construct of the questionnaire is measured by a 5-point Likert scale where ‘1’ to ‘5’ indicates ‘strongly

disagree’, ‘disagree’, ‘neutral’, ‘agree’ and ‘strongly agree’, respectively.

3.1. Participants

Data from the National Bureau of Statistics of China (NBSC) shows that there were more than 3.13 million (in 2020) postgraduates in China mainland and 0.66 million overseas Chinese postgraduates (in 2018) respectively. The data still have an upward trend in recent years. As we mentioned, some of them had work experience before they returned to HEIs to pursue postgraduate studies. Among this group of students, we recruited target participants who had at least one year of full-time work experience. Finally, we received 120 completed questionnaires. Demographic information, including ethnic group, gender, and major, are summarized in Table 1.

Table 1. Demographic characteristics of respondents

Items	Frequency	Percentage (%)
Gender		
Female(1)	67	55.8%
Male(2)	53	44.2%
Ethnic group		
Han Chinese	112	93.3%
Other ethnic groups	8	6.7%
Student leader		
Yes	81	67.5%
No	39	32.5%
Major		
Science and engineering	47	39.2%
art and law	28	23.3%
management	11	9.2%
economics	10	8.3%
education	24	20.0%
Current HEI Location		
eastern region	34	28.3%
central region	36	30.0%
western region	50	41.7%
HEI graduated from		
project 985&211 universities	29	24.2%
other domestic universities	87	72.5%
oversea universities	4	3.3%

3.2. Data Analysis

The software SPSS Statistics 19 was used to carry out statistical analysis. Prior to regression analysis, the collected data was tested for reliability and validity, and the results were shown in Table 2.

Table 2. Tests of reliability and validity of overall data

	Indices	Number
Reliability	Cronbach's Alpha	0.741
	Standardized Cronbach's Alpha	0.720
Validity	Kaiser-Meyer-Olkin metric (KMO) of Sampling Adequacy	0.715
	Bartlett Sig.	0.000

The total testing results show that Cronbach's Alpha is 0.741, reflecting the excellent internal consistency of the data and consequently high data reliability. In addition, KMO is 0.715 and Bartlett significance is 0.000, illustrating that the total data is appropriate for conducting factor analysis, which benefits the verification of the validities of each latent variable. Furthermore, we also applied the Principal Component Analysis (PCA) combined orthogonal method for factor rotation to test the validity of the collected data. By extracting 5 factors from 18 variables, it shows that the eigenvalues of the 5 factors explain the total variance of 66.340%, and every factor load is greater than 0.71 (see Table 3), indicating high validity of the data.

Table 3. Results of confirmatory factor analysis for testing the validation of the data

	Factor loading				
	1	2	3	4	5
Learning ability	.193	.834	.080	.080	.140
Learning interest	.192	.845	.024	.008	.130
Academic performance	.076	.722	.034	.257	.003
Satisfaction of major	.108	.005	.084	.825	.153
Satisfaction of ability	.056	.204	.129	.818	.066
Employment assistance	.173	.030	.199	.256	.805
Family condition	.039	.271	.396	.003	.716
Economic support	.108	.115	.786	.021	.219
Mental support	.196	.165	.781	.064	.178
Role of diploma	.793	.218	.193	.048	.074
Promotion opportunity	.889	.153	.124	.006	.120
Salary	.875	.097	.119	.012	.038

3.3. Result and Discussion

The logistic regression result is shown below (Table 4)

Table 4. Binary logistic regression

	B	Sig.	Exp(B)
Learning ability	-.306	.399	.737
Learning interest	.331	.338	1.393
Academic performance	.643	.022	1.903

Satisfaction of major	-.631	.024	.532
Satisfaction of ability	-.299	.271	.741
Employment assistance	-.048	.844	.954
Family condition	.175	.625	1.191
Economic support	-.755	.011	.470
Mental support	.974	.003	2.649
Role of diploma	.061	.881	1.063
Promotion opportunity	-.410	.314	.664
Salary	.149	.698	1.161

As illustrated above, Academic performance Satisfaction (AS), Satisfaction of Major (SM), and Family Support (FS) are all significant influencing factors of the decision-making of pursuing postgraduate education among Chinese postgraduates who had work experience.

First of all, the regression coefficient of Family Mental Support (FMS) is 0.974, and it bears 2.649 as advantage ratio, which significantly influences postgraduate education choice in this research. That is to say, if FMS were to change one unit, then the probability of pursuing postgraduate education would increase by 2.649 times than the probability of continued work. Secondly, Academic performance Satisfaction (AS) also significantly affects postgraduate education decisions because its regression coefficient is 0.643, and the advantage ratio is 1.930. In other words, AS's rise of one unit would result in the probability of postgraduate education performing 1.930 times larger than the probability of continued work. Last but not least, Satisfaction of Major (SM) and Family Economic Support (FES), whose regression coefficients are -0.631 and -0.755 respectively, both negatively relate to Postgraduate Education Decision (PED). This means that if SM and FES increased one unit, the probability of FED would behave 0.532 and 0.470 times respectively lower than the probability of continued work.

Based on the results, the Postgraduate Education Decision model can be modified as follow (Fig. 2).

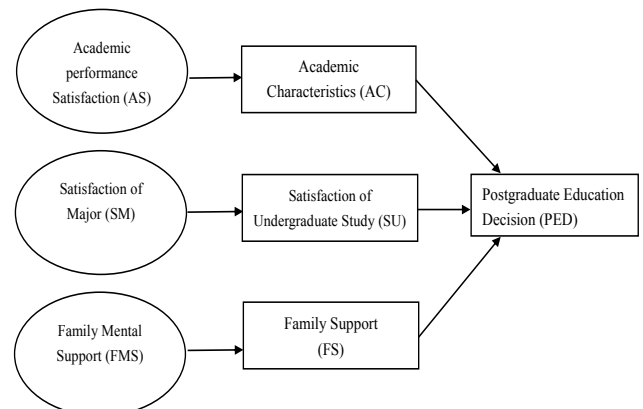


Figure 2. Modified factors influencing postgraduate education decision

4. IMPLICATIONS

From above analysis, this study proposed the following suggestions for postgraduate students, their families and HEIs.

- a) Individual level: Academic performance Satisfaction (AS) has a positive influence on Chinese postgraduates' choice of pursuing postgraduate education. Hence, students should aim for academic excellence during undergraduate studies to enhance comparative advantages and chances of getting accepted into postgraduate studies. Additionally, HEI students should make both short-term and long-term to be prepared for challenges that they might encounter.
- b) Family level: As analyzed above, Family Mental Support (FMS) significantly and positively influences Postgraduate Education Decision (PED). Hence, family members, especially parents, should be more concerned about students' mental well-being and help them make informed career choices through effective communication.
- c) HEI level: HEIs should attach great importance to the issue that Satisfaction of Major (SM) negatively influences Postgraduates Education Decision (PES). On the one hand, if feasible, HEIs might consider providing opportunities for students to switch majors. On the other hand, HEIs could offer career planning and counselling services to students to better match their employment objectives.

5. CONCLUSION

This study investigated the key factors influencing postgraduate education decisions among Chinese students with work experience through regression analysis. Data was collected by online questionnaire surveys and analyzed using SPSS to test the relationship between dependent and independent variables. A conceptual model was constructed to illustrate the relationship. It was found that Academic performance Satisfaction (AS) has a positive influence on Chinese students' choice of postgraduate education; Family Mental Support (FMS) significantly and positively influences Postgraduate Education Decision (PES); Satisfaction of Major (SM) significantly and negatively influences Postgraduate Education Decision (PES). Based on these results, this paper proposed suggestions at the individual, family, and HEI levels to predict the number of postgraduates in the future and improve the quality of career counselling services in HEIs.

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