

The Influence of Family Factors on Students' Choice of Major

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Abstract: The family factors have a crucial influence on the choice of occupations. The present study analyzed the family factors through a combination of qualitative and quantitative research. Methods used in the present study were the professional disposition research method and Colaizzi's qualitative research method. The study showed that students from better-off families had clear preferences for humanities and social sciences majors, while children from less well-off families had to give priority to such issues as income and tuition fees. The analysis of the qualitative study found that at this stage, different genders were more significantly influenced by family factors, with female being more impacted by family factors than male. This study suggests that future research on students' professional choices should pay attention to family factors. Concerning the family environment, this study illustrates its significant role in student's choice of major and their future development. Parents should choose a more suitable major for their students based on the family background and the student's interests.

Keywords: family factors, choice of profession, quantitative research, qualitative research

1. Introduction

Occupational psychology was originated from 1908. In occupational psychology, career development and career choice have always been important issues in this field of study. The choice of major is closely relevant to the future career of students, and the choice of major will affect students' professional satisfaction, which in turn will have an important impact on students' motivation and learning effectiveness [1]. If students choose a major that they do not understand or enjoy, it will result in a waste of social resources and family capitals for training university students. On the other hand, it will have a significant impact on students' future confidence in employment and their ability to work after graduation.

As an important environment for students to learn and grow, the family has a subtle influence on students. Students will draw on some of their family's advice when choosing majors. Family influences are influenced by a combination of factors such as the financial situation, family experience, family atmosphere, parental occupation. Therefore, it is important to study the influence

of family factors on the choice of major in order to facilitate students' choice of major and to promote better commitment to their careers.

1.1. The Influence of Family Economic Factors on Choice of Profession

Researchers explore five separate factors that influence parents' willingness to designate English language learning centers for their children in *Factors Affecting Parents' Intention to Choose English Centers: The Role of STEM Education* [2]. The results suggest that family factors play a very important role in the choice of profession. In general, prior studies indicate that the impact of family factors on the decision to pursue a major may be roughly split into three categories: the impact of family economic issues, the impact of family cultural elements, and the impact of family social aspects.

The influence of family financial factors on students' choice of major is firstly reflected in their results of high school entrance examination. Different families' financial circumstances impact the extent to which different students have access to extra-curricular learning resources. With the increased pressure of homework, more and more families are buying study materials or enrolling students in extra-curricular classes [3]. For families with an annual income of less than 10,000 yuan, it is almost difficult to access extracurricular learning resources, and students' access to extracurricular learning resources to a certain extent affects their performance in the college entrance examination, which has a significant impact on their choice of majors [4,5].

From the perspective of social capital, families with poorer economic status also have relatively less access to social resources [6]. Those families generally lack access to information about occupation, leading children from poverty families to make choices without enough professional guidance. Thus, it may make it difficult to achieve the best professional choice.

Children from poverty families choose their majors with a strong focus on future salary levels but ignore their own compatibility with the major [7]. This mismatch often result in choosing a major that is not suitable for them.

In addition, family economic factors are also related to the development of area where students' study. While urban students choose their majors based more on their personal interests and the advice of their parents. Rural students pay more attention to the employment rate and the popularity of majors when choosing their majors [8]. For student with a choice of art majors, it requires early investment in art education costs. And the choice is influenced by their parents' educational beliefs and the family atmosphere. So, a smaller proportion of children from rural families enroll in art colleges, while a higher proportion of children from urban families enroll in art colleges [9]. Through empirical research, Hao found that rural parents have relatively little access to information about occupation and they offer poor guidance for students [3].

1.2. The Influence of Family Cultural Factors on Choice of Profession

French sociologist Pierre Bourdieu created the cultural capital hypothesis in the 1970s. The introduction of Bourdieu's cultural capital theory to the family cultural capital on the one hand is the study of the family cultural capital for students' academic ability. Fang argues that the higher educational level of fathers is more conducive to obtaining useful professional information that can guide their children to more appropriate majors [10]. On the other hand, there is an overall consistency between students' educational expectations and the educational experiences of their fathers.

The children of farmers are more likely to choose majors that are relatively difficult to find employment in and majors that are less popular. Rochat and Demeulemeester used a three-step data analysis to find that children from families with university-educated parents were more likely to choose social, economic, legal and literary majors [11]. Children from dominant family cultures were

more likely to major in liberal arts than in STM (a general term for science, technology, mathematics and engineering education). The influence of parents' occupation is implicit to children, and children's early professional choices are influenced by their parents' career perceptions and may use their parents' occupation as a reference [12]. Parents' education level is positively correlated with their children's professional choices. In other words, the higher the parents' education level, the greater the influence on their children's professional choices, and vice versa [13]. At the same time, Fan believes that due to cultural factors, the idea of social division of labor for different genders still has an impact on students' majors choosing. Girls choosing health-related, business, public service, education or liberal arts majors, while boys are more inclined to choose engineering and technology fields [14].

1.3. The Influence of Family and Social Factors on Choice of Profession

Family social factors can be broadly divided into two aspects: family social status and family social relations. Family social status has a certain relationship with economic factors. Children from families with good family social status and economic status will have better development space. They can carefully consider their own conditions, professional orientation and professional interests when making their major choices. They pay less attention to factors such as tuition fees, as well as development prospects of the major [5]. Moreover, the family's social connections also influence the children's choice of profession. Many families choose their children's majors from a practical point of view and use the example of their close acquaintances in the profession. Children are guided by the examples of "successful people" in the family's existing social relationships to make their own professional choices [5]. In addition, the type of parents' occupation directly affects incomes gained by that family. The type of parents' occupation is an important indication of social capital strength of the family [15]. The different occupations of parents in different families make the social information resources they can receive different. Thus there are differences in their access to information on professional choices. Yet, children are also indirectly influenced by their parents' careers, and they frequently use this vocational image as a guide when selecting their majors.

1.4. Gender Differences in the Influence of Family Factors and Choice of Profession

Several studies are conducted on gender differences affecting the choice of majors. In one prior research on gender differences in college students' major choices, Ma mentions that domestic and international studies on gender differences in college students' major choices contain perspectives from psychology, sociology, economics, and education [16]. The relevant theories involve biological determinism, feminist theory, social control theory, and disciplinary stereotypes. Other related studies also mention that women's perception of their social gender influences their choice of major, but less attention is paid to the gender difference in the acceptance of family influence.

2. Research Methodology and Study Design

2.1. Research Hypothesis

Based on the results of previous data studies and theoretical research, the hypotheses of this study are as follows:

1. There are differences in students' choice of major between different family backgrounds.
2. Females are more influenced by family factors than males.

2.2. Research Instruments and Subjects

In this study, a questionnaire exploring family factors on students' choice of major was developed by selecting some questions related to family factors from the 2003 National General Social Survey form and some questionnaire questions used in the literature: 1. Your gender 2. Your place of residence in 3. The subjects you studied in high school are 4. Your major category in university 5. Your family's annual income status 6. Your parents' education level 7. Your parents' occupation category 8. When you first filled out your application to choose your major, what factors do you think most influenced your major choice 9. Do you think the cost of education expenses (such as tuition fees) had an impact on your major choice 10. How much do you think family factors influenced your major choice (the higher the score the greater the influence) 11. How much do you think your parents paid attention to your academic performance in high school? A total of 151 students enrolled in the Class of 2020 undergraduate program were selected, and information related to their choice of major, family economic status, family literacy, and gender was collected. A total of 13 students from different schools and majors were selected for the qualitative survey. The survey was terminated when the information reached saturation, and 11 students participated in the survey.

2.3. Research Methodology

2.3.1. Quantitative Research

The quantitative part of the study was conducted using a questionnaire, which was developed by combining items from other scales with high reliability and validity. The quantitative survey results were automatically derived from the Questionnaire Star platform. The degree of professional inclination was used in the analysis: by referring to the index of professional inclination constructed by Guo et al. and Wang. by measuring the degree of propensity of students from family with different economic levels to choose a major: by dividing the proportion of students of the family social capital-advantaged group enrolling in humanities majors by the proportion of students of the family social capital-advantaged group in the whole, a ratio greater than 1 indicates that students of the family social capital advantaged group tend to choose that major; a ratio equal to 1 indicates that students of the family social capital advantaged group are not inclined to choose that major; a ratio equal to 1 indicates that students of the family social capital advantaged group are not inclined to choose that major; a ratio equal to 1 indicates that the students of the social capital advantaged group do not have a preference for that major; a ratio less than 1 indicates that the students of the social capital advantaged group do not have a preference for that major.

2.3.2. Qualitative Research

The interview method was used in the qualitative study. The outline of the interview was based on the factors affecting students' choice of major, the degree of influence of family factors on students' choice of major, and their views on their own choice of major, etc. It is important to provide some references for high school students who are about to choose their major and their related families to facilitate students' choice of major and to promote their better careers. The outline of the interview is: 1. What do you think are the most important factors affecting your choice of major 2. How do you think family factors affect your choice of major 3. How do you think family factors affect your choice of major 4. Do you think women are more likely to be influenced by family factors than men 5. Do you think the factors affecting college students' choice of major will change after the epidemic is liberalized? The qualitative study used Colaizzi analysis to analyze the interview data. The main steps were as follows: (i) read all the data carefully; (ii) analyze the significant statements; (iii) code the

recurring ideas; (iv) assemble the coded ideas; (v) write a detailed, non-exhaustive description; (vi) identify similar ideas; (vii) return to the participants for confirmation.

3. Research Results

3.1. Analysis of Professional Orientation

This study draws on the China 2022 standard line of wealth and poverty in the statistics of the variables to classify households with different annual incomes into three classes. Households with annual household income above RMB 500,000 are classified as higher-income households. Those with annual income between RMB 150,000 and 500,000 are classified as middle-income households. Those with annual income below RMB 150,000 are classified as lower-income households. Higher-income households are the group with superior household economic capital, middle-income households are the group with average household economic capital, and lower-income households are the group with disadvantaged household economic capital. The strength of the family's cultural capital is classified by the father's education level, classifying a family with a father with a bachelor's degree or above as a higher education family, which has a higher influence of cultural factors, and a family with a father with no education at bachelor's degree or above, which has a weaker influence of cultural factors. According to the classification of social classes in the Report on Social Classes in Contemporary China, the father's occupation is chosen as an important indicator of the family's social capital, and managers and professionals are classified as top workers. Generally skilled workers, and supervisors are classified as middle workers. Manual workers, agricultural laborers, and jobless people are classified as grassroots workers. The indexes of children's inclination towards majors from different family backgrounds are shown in Table 1.

From the point of view of family economic factors, the number of children from low and middle-income families choosing science and engineering subjects is higher. However, as the index of professional inclination does not exceed 1, it is not a clear indication of their professional inclination. The influence of cultural factors on the preference for a major is more pronounced. For families in which the father had a bachelor's degree or higher education, there was a clear preference for children in that family to choose a science or technology major. The propensity to major in humanities, science, and engineering for children of educated fathers exceeds 1, with the highest propensity to major in engineering being 1.5. The propensity to major varies between families with different fathers' occupations, depending on the social factors of the family. The children of senior workers have a low propensity to choose medicine, engineering, and science, with a propensity of 0.76 for humanities, 0.48 for finance, and 0.57 for management. The children of senior workers do not show a tendency to focus on humanities and social sciences, although they have a higher tendency of 0.05 compared to engineering. In contrast, the children of grassroots workers show a clear preference for humanities majors, with a preference of 1.05, as well as a higher preference for engineering majors without a high preference for finance and management majors.

Table 1: Professional inclination of children from different family backgrounds.

Influence Factor	Variable	Humanities	Finance	Management	Science	Engineering	Medicine
Economic factors	Higher-income households	10.7	0	3.5	7	3.5	0

Table 1: (continued).

	Middle-income households	0.53	0.6	0.4	0.3	0.8	0.3
	Lower-income households	0.4	0.06	0.1	0.3	0.30	0.04
Cultural factors	Tertiary Education (Bachelor and above)	1.3	0.2	0.2	1.3	1.5	10
	No tertiary education	0.3	0.11	0.11	0.2	0.20	0.03
Social factors	High-level workers	0.76	0.48	0.57	0.67	0.06	0.28
	Middle-level workers	0.628	0.2	0.2	0.4	0.38	0.18
	Grass-roots workers	1.05	0.16	0.16	0.55	0.61	0.11

3.2. Gender-specific Studies Influenced by Family Factors

3.2.1. Factors Influencing Students' Choice of Major

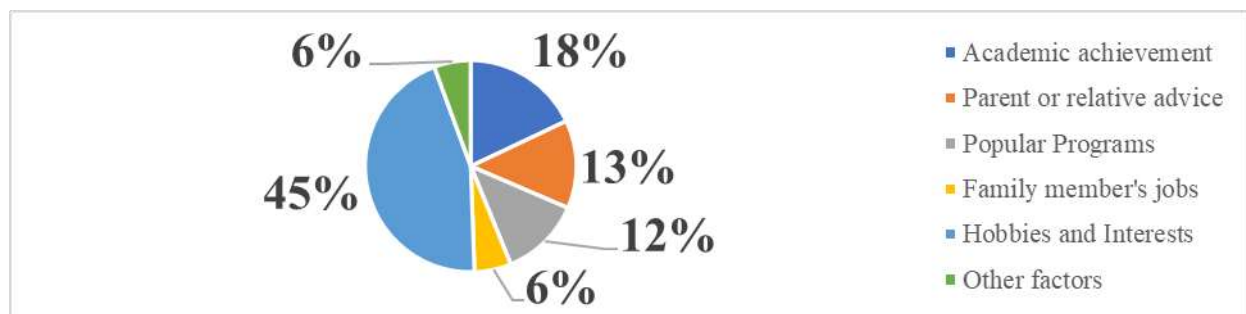


Figure 1: Factors influencing the choice of occupation (male).

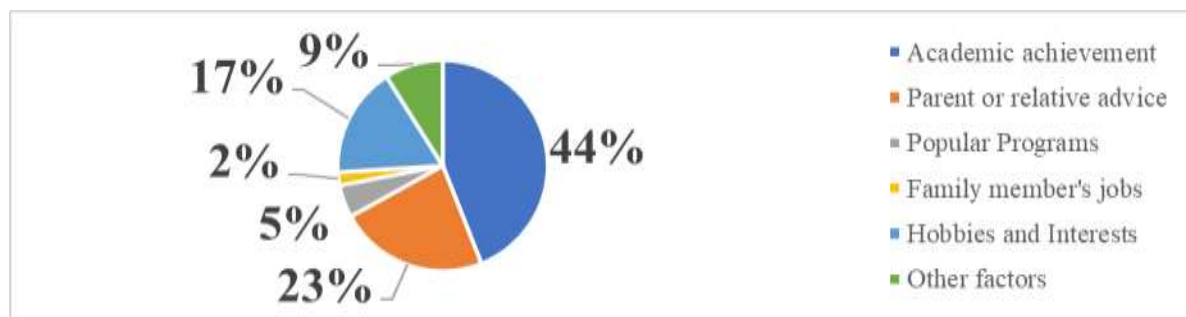


Figure 2: Factors influencing the choice of occupation (female).

As can be seen from the figures 1 & 2, the influence of parents' or relatives' advice is more influential in female's choice of the profession than in male's. This suggests, to some extent, that women are more likely to be influenced by family factors than men. However, the most important factor influencing students' choice of major is their hobbies and interests. This suggests that students today are more autonomous, and that parents and society have become more tolerant. Students today are more able than before to choose their majors rationally, based on their interests, their family's opinions and their professional development.

In addition, according to the results of the seventh census, the proportion of "the nuclear family" has increased and the proportion of "three generations under one roof" has decreased. The older generation tends to have a stronger bias towards gender and this change has allowed families to think more out of the box and to move with the times.

3.2.2. Parental Concern for Student Achievement During High School

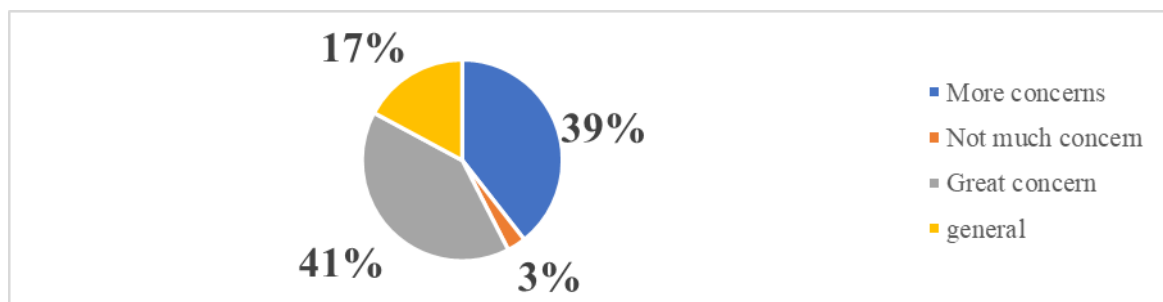


Figure 3: Factors influencing the choice of occupation (male).

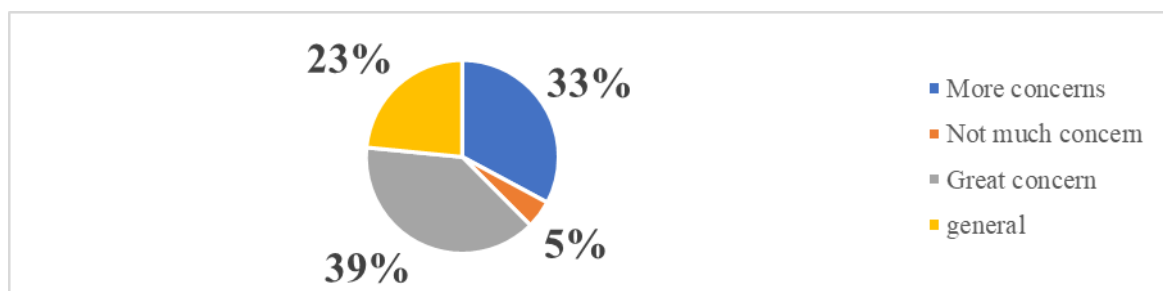


Figure 4: Factors influencing the choice of occupation (female).

Referring to figures 3 & 4, parents' attention to student achievement is higher in high school, with less difference between males and females. To some extent, this reflects the importance of the college entrance examination to Chinese families, with parents giving a high level of attention. Parents are a

little more concerned about the academic performance of males than females. Females are more self-disciplined in their learning than males. Some academic studies have found that in 21st-century children who perform well in kindergartens share the same trait of self-discipline. Self-regulation in children aged from 3 to 6 years is evidenced by raising their hands when asked questions, waiting patiently for their turn to distribute items, paying attention, listening to the teacher, etc. Some American kindergartens even consider these qualities to be the foundation of a successful life. And Cameron's research shows that boys mature a year later than girls when it comes to self-discipline. Many boys graduate from kindergarten with the seeds of self-discipline just sprouting, while girls are already skilled at disciplining, managing themselves and laying the groundwork for the next step in their studies. The girls' advantage in self-discipline extends further when they enter secondary school, explaining to some extent why girls are ahead of boys in various subject areas.

3.2.3. The Influence of Family Factors on the Choice of Major

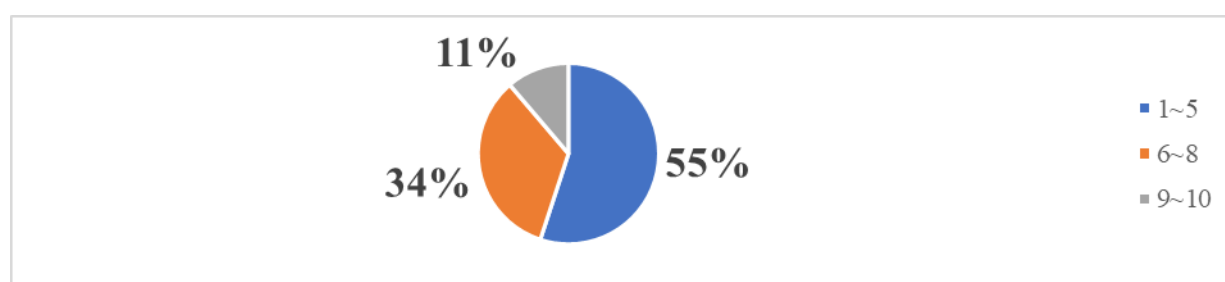


Figure 5: The influence of family factors on the choice of major (male).

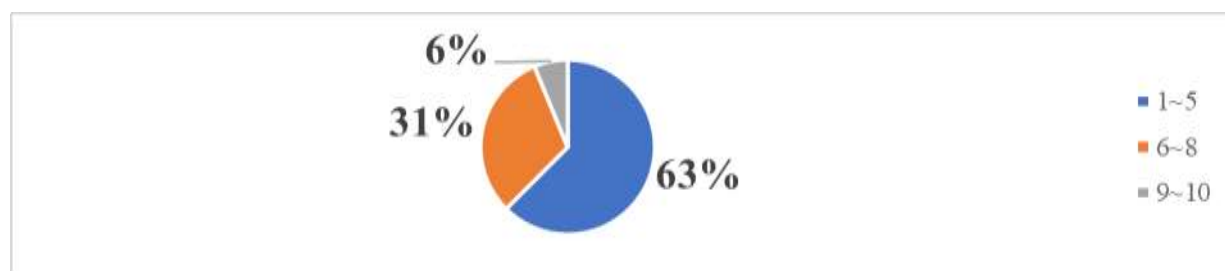


Figure 6: The influence of family factors on the choice of major (female).

On a scale of 1 to 10, we defined 1 to 5 as less influential, 6 to 8 as moderately influential, and 9 to 10 as highly influential. Collating the data in figures 5 & 6 shows that a higher percentage of women consider family factors to be less influential on them instead, somewhat contradicting the result that women are more influenced by family factors.

3.3. Results of Qualitative Studies

The results of the qualitative study are as follows.

Regarding the factors influencing the choice of majors, the answers of the interviewed students can be roughly divided into the categories of personal interests, scores, parents' advice, and employment prospects.

For the influence of family factors on the choice of major, 7 respondents suppose that family factors play an important role in the choice of major. For example, respondent C mentioned that "My parents have a great influence on me, and my mother really wants me to become a teacher". Three respondents indicated that family factors played a limited role in choosing a major. For example, respondent B mentioned that "My parents respect my choice and are very supportive when they know

that I want to be a teacher”. Only one respondent thought that family factors do not influence the choice of profession. For example, Respondent E said, “I did not have much choice because of my low score, so I choose the major merely according to my score.

Regarding the role of gender in family factors influencing the choice of major, six respondents thought that gender would influence the role of family factors on the choice of major. For example, Respondent A mentioned that “Girls listen to their families more, while boys have more autonomy”. Five respondents thought that there was no difference between men and women in terms of the influence of family factors on the choice of majors. For example, Respondent B said, “It depends on the individual, it is still up to the score to decide what to apply for.”

4. Discussion

4.1. Quantitative Versus Qualitative Studies

Quantitative studies are usually judged using a scale, and the evaluation results are abstract scores. Abstract scores are judgments of “good” and “bad” and to some extent could not provide insight into the true influence of family factors in students’ major choices. In addition, some of the results of this study were biased from expectations. Therefore, the feedback provided by quantitative studies has certain limitations. Qualitative research is mainly based on systematic description and analysis, which can not only explain the “large” and “small” impacts, but also indicate where the specific impacts are and whether they are consistent with existing theories. Therefore, the feedback provided by qualitative studies is as valid as quantitative research.

4.2. The Combination of Qualitative and Quantitative Research Will Become a Trend

At present, the integration and penetration of natural sciences and humanities, and the combination of qualitative research and quantitative research will inevitably become a trend. Quantitative research conducts statistical analysis and investigation from the macro level and measures the quantified part of things to ensure the rigor and scientificity of the survey results. However, quantitative research does not take into account special situations well and does not provide a comprehensive understanding of individual views. Qualitative research is the understanding of the totality of things. Executive research advocates attention to the development of individuals, especially weak forces. Therefore, qualitative research is more suitable for studying some problems that are difficult to quantify or cannot be quantified. Therefore, the combination of qualitative and quantitative methods in the analysis of influencing factors can improve the richness and logic of the survey content.

4.3. Discussion of the Results of Quantitative Studies

Through the analysis of professional tendency, this study found that children of different families have significantly different tendencies in choice of major. Children with large family capital advantages can pay more attention to factors such as their own characteristics, their own interests and the future development space of the major in the choice of major and are more inclined to humanities majors. Some children with large family capital advantages are influenced by the subtle influence of the family, and they also show obvious professional tendencies for engineering and science majors. Conversely, children with weak family capital pay more attention to issues such as tuition fees, future job stability, and job salaries in their choice of majors. This may be due to the fact that children with weak household capital feel more financial pressure from the family. Influenced by family social factors, they generally want to get rid of jobs similar to their parents’ occupations. This may stem from the child’s desire to work in jobs that bring high social status, often different from the current occupations of parents with less family capital. Similarly, children with weak family capital also show

a clear tendency to choose humanities majors. On this basis, children with no obvious advantage in family social capital are more inclined to science and engineering for the choice of major, while children with better family social capital do not have a significant tendency. The preference for science and engineering majors may be related to factors such as the proportion of jobs in the current job market and the average salary of the occupation. In addition, professional inclination is affected by economic factors, children from high-income families can choose their favorite majors, while children from low-income families may choose majors that they are not good at or are unpopular due to other factors. Children of high-income families have relatively little need to consider income when planning their careers, because families can base themselves on certain financial assistance. Children from low-income families may choose majors that they are not good at in order to seek high-income careers. In addition, children with better family culture are influenced by their parents' high education and show obvious tendencies to choose humanities and social sciences majors, but the specific professional tendencies of children with lower parents education are not obvious.

4.4. Discussion of the Results of Qualitative Studies

4.4.1. Factors Influencing the Choice of Majors among Contemporary College Students

Respondents can be categorized as interest-based, family-led, score-led, employment-oriented and economic-oriented. Personally-oriented students take their own interests and personalities as the basis for choosing majors. For example, student C said "I am particularly interested in history, may not be very good for employment as soon as possible, but I just like it". In addition to the predisposition to major, there is also a preference for the location of the school, Student A remarked "especially likes the city of Qingdao, I would rather lose 30 points and want to go to Qingdao University".

Students who appreciate families' opinions include student C, who said, "The family hopes that I will choose a more stable major, particularly hope that I will engage in the profession of teaching."

The majority of score-oriented students are constrained by their scores, have a very limited range of options, and frequently have college attendance as their primary objective. Student E stated, "Grades are poor, there is really no major to choose from, but also want to learn to earn more money, such as medicine, but they are liberal arts students cannot learn." Employment-oriented students mainly look at professional employment prospects, student F said "Before the tutoring institution was very hot, just learning English and thinking about becoming a teacher in the future, but it was particularly affected by the double reduction." Economic-oriented students are mainly affected by their family's economic background, and student H considered "my family of origin has a great influence on me, the family conditions are very difficult, and I am more gold-worshipping."

4.4.2. The Extent to Which Family Influences Students' Choice of Major

The influence of family on students' major choice is closely related to the dominant type of major choice mentioned above, and the influence of family on interest-oriented students and score-oriented students is small. For example, student C said: "The parents are very open-minded and support me in making my own choices." "The score is there, I fill it in myself, and the parents can't give any advice." said student E. Family-led, employment-oriented and economic-oriented students are often more influenced by their families. For example, student I stated: "The influence is significant, my mother wants me to be an English teacher, I am also the first college entrance examination, I don't know much about the situation of various majors, I think my parents are quite right".

4.4.3. The Impact of Gender Differences on the Size of the Family Impact

Half of the respondents said that gender has no impact on choice of occupation, and it is all depended on personal viewpoints. Student A said: “It depends on the personality, even girls are very independent, it has nothing to do with gender.” Student D stated: “It doesn’t matter much, there is no choice if the grades are not good, and the good grades have their own ideas.” The other half of respondents believe that gender has more or less an impact on the choice of major. Student C stated: “Girls listen more to the family, girls puberty comes earlier, if you want to rebel, it is earlier, boys puberty comes later, it is estimated that it is just the period when choosing a major more have their own ideas” Student E said: “More or less influential, the idea of male and female differences still exists, girls are relatively easier to be persuaded, boys are more independent.”

It can be seen that the influence of gender on the influence of family factors on professional choice is complex. Researchers need to try to further explore the mechanism of gender influence. Clarifying the mechanisms of impact can help translate research findings into guidance for educational practice.

5. Conclusion

This study explored family factors influencing major choice using both qualitative and quantitative studies. The research methods are professional inclination research methods and Colaizzi qualitative research methods. The results of the professional tendency study show that students from families with better economic conditions are affected by family economic factors and have a clear tendency to choose humanities and social sciences majors. Children with average family economic conditions need to give priority to employment, tuition and other issues. Through qualitative research analysis, it is found that at this stage, different genders are more obviously affected by family factors, and female are more affected by family factors than male. This study provides preliminary evidence to clarify the mechanism of influence of family factors on children’s professional choice. Future research directions were also discussed.

References

- [1] Peng, WB., LV, L., XU T., *The Relationship between College Students’ Professional Satisfaction and Learning Engagement: The Mediating Role of Self-Regulating Learning Ability [J]. Journal of Southwest Normal University (Natural Science Edition)*, 2017(10): 14 6-152.
- [2] Anh, T.D.V, Duyen, N.N., Ngoc, T.T., Nhi, L.D.B., Nhi, V.H.Y., Su, L.H., *Factors Affecting Parents’ Intention to Choose English Centers: The Role of STEM Education[J]. Journal of Multimedia Information System*, 2020, 7(1).
- [3] Panpan, HAO, Master/PhD dissertation. Hubei: Hubei Normal University, 2014(4).
- [4] Fan, W., Hao, PP., Zhu, JH., *A Study on the Influence of Household Capital on College Students’ Professional Choice—Based on the Perspective of Educational Equity[J]. Journal of Chongqing Technology and Business University(Social Science Edition)*, 2015(3): 118-128.
- [5] Wang, CX., *Factors affecting the choice of college majors of high school students[J]. College Entrance Examination*, 2021(04): 106-107.
- [6] An, GG., Yang, Y., *Differences in the influence of parental participation on children’s academic achievement in families with different socioeconomic status[J]. Education Development Research*, 2018, 38(20): 17-24.
- [7] Montmarquette, C., Cannings, K., Mahesredjian, S., *How do young people choose college majors[J]. Economics of Education Review*, 2002, 21(6): 543-556.
- [8] Yang, XQ., Lv, KY., *Intergenerational transmission of social stratification: The influence of household capital on college entrance examination volunteer application[J]. China Education Journal*, 2019(6): 24-29.
- [9] Meng, DF., Li, Z., Zhou, SW., et al. *Journal of Yuzhou University (Social Science Edition)*, 1996(3): 64-75, 94.
- [10] Fang, YL., *Research on the Difference between Social Stratification and Higher Education Admission Opportunities[D]. Fujian: Xiamen University*, 1991.
- [11] Rochat, D., Demeulemeester, J.L. *Rational choice under unequal constraints: the example of Belgian higher education. Economics of Education Review*, 2001, 20(1): 1.
- [12] Huang, PP., *Analysis of influencing factors of college students’ choice of major[D]. Jiangxi University of Finance and Economics*. 2017.

- [13] Fan, MC. *Modern Education Management*, 2013(1): 113 - 117.
- [14] Fan, MC., *Analysis of gender differences in the choice of majors by college students in China*[J]. *Modern Education Science(Higher Education Research)*, 2011(2):56-60.
- [15] Gao, YL., Wu, ZX., *Analysis on the influencing factors of college students' major choice under family background*[J]. *Rural Economics and Science and Technology*, 2016, 27(24):218-221.
- [16] Ma, LP., Xiong, Y., *Gender Differences in College Students' Major Choices: Based on a Survey of 85 Universities in China*[J]. *Higher Education Research*, 2016, 37(5): 36-42.