Research on Influencing Factors of College Students' Choice of "Further Study" based on Coding Technology

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Abstract. With the progress of society and the continuous development of economy, science as well as technology, China's demand for talents has been increasing in both quantity and quality, which has led more and more college students choose to apply for the graduate school. Most graduates think the postgraduate entrance examination is beneficial to their career. However, in recent years, it has been increasingly difficult for the graduate students to find a job. Therefore, it is necessary to deeply understand college students' attitude towards "further education" and its causal factors. This study detects the core category via coding technology, identifies the correlation through semantic network and word frequency model, and analyzes from multiple perspective, such as political, economic, social, cultural, psychological factors. As a scientific support, this study will play an important role in guiding college students to find their future goal.

Keywords: the choice of postgraduate entrance exam, coding technology, reliability analysis.

1. Introduction

With the aim of developing "Double first-rate universities" and the changes of the acceptance rate of the graduate schools, it has become an important subject for the universities to guide college students to "further education" in their career plan.

In addition, the psychological influence on students varies with the reasons for them to choose further education as their next career step. According to the BECK depression self-rating scale, 84 percent of the students who took part in the postgraduate entrance examination were likely to suffer from depression [1]. The reasons for the survey subjects to take the graduate school entrance exam, ranked by number from the top to the bottom, are pressure of job searching, financial position, family and affection problems.

Therefore, our team carries out a series of surveys on the factors influencing the choice of "further education", which is both conducive for school to make effective guidance, and beneficial for students to get proper career plan.

2. Methods

There are mainly seven steps in this research: questionnaire design, questionnaire distribution and recycling, open coding, primary and secondary clustering, core genericity selection, comprehensive evaluation, strategic suggestions.

3. Results

3.1 Analysis of Technical Results

3.1.1 Open Coding

Open coding is the conceptualization and categorization of reading materials to condense more concise categories.

The questionnaire results were coded independently by three team members. First, the sources of the data were encoded using different nomenclature. For example, the no. 2 questionnaire code from class A universities can be coded as A (2), and the rules can be set up by themselves, and so on. This method is used to decompose the data and annotate the phrases and sentences with specific meanings in the decomposed data, and extract relevant concepts. In order to ensure the reliability and validity

of the survey results, the research used Patton's research triangles, in which the coding results were retained only when obtaining same coding by least three team members.

Through open coding, we obtained 49 concepts and 15 sub-categories. Table 1 is an example of open coding to categorize the contents of the questionnaire.

Table.1 Open coding example

The questionnaire data	Key words	Concept	Category
In order to have a better development, master's degree is a condition for promotion in the future, because higher education will have more choices, better employment means higher income and better prospects. ND (14)	Highly educated High-income Good development	Conducive to employment	Good life BY (4), ND (14), BH (32), HD (48), ...

3.1.2 Primary Coding

The function of primary coding is to link the categories obtained by open coding, and then to get the major categories and sub-categories. In this study, rost.cm software was used to analyze the internal connection of high-frequency subject words and obtain the final connection between categories of high-frequency subject words. The VNA semantic network graph is generated by analyzing the social network and semantic network.

The spectrum of high-frequency keywords is composed of different nodes and lines. Each node represents a high-frequency word, and the line between nodes represents the co-occurrence of two words. These co-occurrence relations are the basis of analyzing the relations among categories. The semantic network diagram is shown in Fig. 1. The specific contents are shown in Table 2.

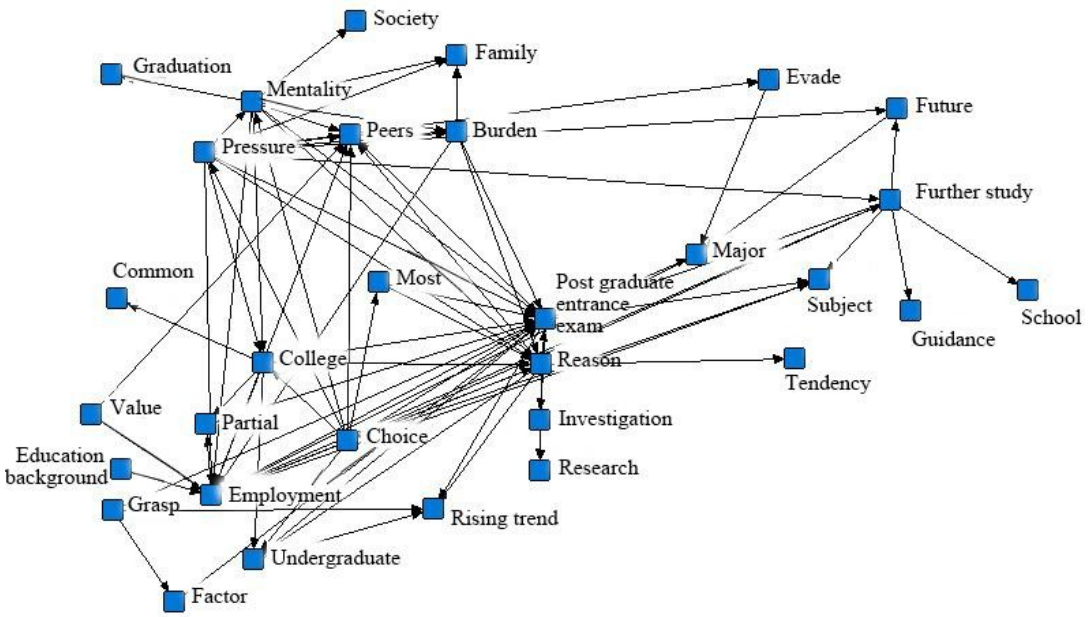

Fig. 1 Semantic network diagram of high frequency keywords

Table.2 Primary coding process

Deputy category	Main category	Concrete content
Conducive to employment, core competitiveness, development of network, conformity, college level, parental expectations	Make employment easier	In order to reduce the difficulty of employment, students hope to improve their core competitiveness and develop contacts through graduate studies.
Improve ability, deep learning and innovation, make up for the college entrance examination regret	Deep learning to realize the ideal	The main category "deep learning to realize ideal" indicates that the purpose of the postgraduate entrance examination is to expand my knowledge scope.
Ideal income, early independence, sharing the family burden, the financial burden of postgraduate entrance examination	Economic problems	It reflected the choice to take an examination of grind and give up to take an examination of grind two respects reason.
High risk, low income, avoiding employment pressure and learning exclusion	To avoid stress	Most choose to take part in the postgraduate entrance examination or study abroad to avoid employment pressure

3.1.3 Select Coding

The purpose of coding selection is to develop the inner meaning of the core category, discover the inner connection of the core category, in order to get a reasonable conclusion. Combined with the questionnaire survey, we analyzed the logical relations of the four main categories and detailly explained the influencing factors of contemporary college students' choice of "further education".

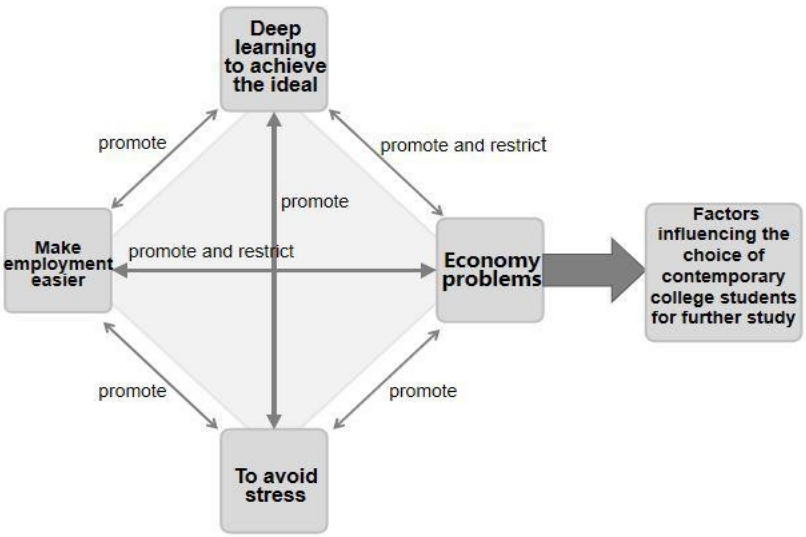

Fig. 2 Main category diagram

3.2 Reliability and Validity Analysis

SPSS was used to analyze the reliability of this questionnaire. Credibility has the following reference rules for Alpha coefficient: a value greater than or equal to 0.9 indicates good reliability of the scale; 0.8-0.9 indicates acceptable reliability;0.7-0.8 some items need to be revised; and anything less than 0.7 indicates that some items in the scale need to be discarded [2].

Table.3 Reliability analysis results

Cronbach's Alpha
.831

According to the survey results, the reliability is acceptable.

4. Conclusion

As shown in figure 2, categories promote and restrict each other. Psychological, economic, social and other factors contribute to the influence of college students on the choice of "further education". Therefore, before choosing whether to take the postgraduate entrance examination or not, college students should consider their advantages and disadvantages from these four aspects, and then make plans for the future.

References

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