Research on the Professional Identity of Students Majoring in Preschool Education in Hubei Colleges and Universities—Based on Word Frequency Analysis of Interview Texts

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Abstract: Preschool education professional identity is a dynamic development process in which individuals can learn professional knowledge of preschool education, invest in professional emotion, solve professional problems encountered, and make positive behavioral responses in professional learning. Therefore, the professional identity of preschool education is divided into four dimensions: professional cognition, professional emotion, professional will, and professional behavior. This research mainly adopts the perspective of qualitative research, using the interview research method, based on the interview text and with the help of ROST CM6 text mining analysis software to conduct qualitative analysis. The analysis results show that in the dimension of professional cognition, learners pay more attention to course learning content and professional development prospects. Concerned more; in the dimension of professional emotion, respondents paid more attention to individual interest tendencies, teaching styles of teachers, school management methods, etc.; in the dimension of professional will, it was mainly reflected in the will of learners to solve professional problems; in the dimension of professional behavior it is mainly reflected in the performance of learners in learning professional knowledge and professional practice activities.

Keywords: Hubei colleges and universities, Preschool education, Professional identity, Word frequency analysis, Interview method.

1. Introduction

With the gradual increase of people’s attention to preschool education, the preschool education profession is also developing continuously. It has always been an educational goal to cultivate high-quality and excellent preschool education teachers for the country, and the only way to achieve national “first-class” curriculum construction results. According to the research of relevant scholars, the professional identity of students majoring in preschool education can reflect the development of preschool education to a large extent, and the development of preschool education directly affects the self-learning and development of students majoring in preschool education. Professional identity is the root cause of preschool undergraduates engaging in preschool education, and it is also the motivation for preschool education students to work after graduation. Professional identity is closely related to students’ professional learning and their own development, and also affects the development of preschool education majors in schools. Therefore, analyzing the professional identity of students majoring in preschool education, exploring its influencing factors, and putting forward corresponding countermeasures, is beneficial to the development of individual students, colleges and universities and the cause of preschool education.

In terms of etymology, identification is more directed to the relationship between individuals and themselves, emphasizing the internal unity of the subject itself[1]. It is generally believed that the term “identification” was first proposed by the Austrian Psychoanalyst S. Freud, who defined the concept of “identification” as an individual’s psychological assimilation activities. Activities are mainly located in the subconscious of the individual, and are deepened in the interaction with others and themselves, and then gain self-recognition or value filling[2]. In this study, “identity” means “unity”, which means that individuals, based on self-cognition, judge the characteristics of external things such as value, function, form, etc., to determine the degree of recognition of external things[3]. The theoretical basis of professional identity is social identity theory, which holds that people strive to achieve or maintain a social identity that enhances an individual’s self-esteem, especially enhances social identity recognition through favorable comparisons with others[4]. Professional recognition is the dynamic recognition process of learners for the knowledge and skills, processes and methods, emotional attitudes and values involved in the profession. It is the process of gradually generating emotional recognition of the majors you have learned, and then implementing positive external actions[5]. Therefore, the author believes that the professional identity of preschool education is the dynamic development process of individuals’ learning of professional knowledge in preschool education, their emotional investment in preschool education, the way they encounter professional problems, and the ability to make positive behavioral responses in professional learning.

2. Statement of Problem

Professional identity is the attitude of students towards the major they study. It not only affects students’ learning engagement and future development direction, but also affects the quality of professional talent training and the construction and development of the major itself. According to the relevant literature, there are many studies on the current situation of college students’ professional identity, and the research perspectives and research results are not completely the same. There are many relevant researches that carry out relevant investigation and analysis from the perspective of the degree
of professional identification. Most of the research results show that the professional identification of college students is relatively good, and the professional identification is generally at an upper-middle level. There are differences in each dimension. For example, the research results of Hu Difei et al. show that the professional identity of postgraduates is generally good, but the level of professional cognition is relatively low.[6] However, there are still some studies showing that the degree of professional identity of college students is average, at a medium or low level, and there is still a lot of room for improvement. For example, Zhang Dan surveyed the postgraduates of education masters of Shenyang Normal University, Harbin Normal University and Liaoning Normal University, and found that their professional identity level was at a medium or low level, and their professional identity was low. From the perspective of influencing factors of professional identity[7], some scholars can be divided into internal factors and external factors macroscopically. Internal factors such as personal practical experience[8], academic performance[9,10], personal characteristics[11], personal interests[12], motivation for professional choice, individual learning attitude and professional expectations[13] and so on, external factors such as parents’ education level, family economic status[14], training mode, employment prospects, teacher guidance[15], subject status, social public opinion[16] and social recognition and so on.

In addition, some scholars have studied from the perspective of the explicit and implicit degree of professional identity and the correlation between the two. For example, Hu Zhaihai and Huang Helin took freshman and sophomore students majoring in tourism management as the survey objects, and used the research method combining explicit investigation and implicit experiment to study the professional identity of college students. The identification shows an obvious separation between explicit and implicit. College students generally lack identification at the implicit level, but they are more identified at the explicit level.

There are two main viewpoints in academic circles to understand the category of professional identity connotation. One is to regard professional identity as a part of self-identity. For example, B.E. Ashforth and B.S. Schinoff believe that professional identity is one of the core challenges in the process of self-identity formation in late adolescence[17]. The other is to classify professional identity into the category of social identity or collective identity, and think that professional identity is an individual’s identification with the group and social category to which he belongs, an individual’s understanding of the membership of a certain group, and his attitudes, emotions, and corresponding behavior toward the profession and the group to which he belongs. In addition, some researchers believe that professional identification only refers to the identification of the major itself[18]. Another part of the researchers believe that professional identity includes not only the identity of the major itself, but also the identity of the professional counterpart[19].

3. Purpose of the Interview

This research is based on the theoretical framework of professional identity of preschool education, and analyzes the influencing factors of professional identity thinking of students majoring in preschool education in Hubei area. With the continuous progress of research, professional identity theory has four dimensions, namely professional cognition, professional emotion, professional will and professional behavior. As a qualitative research method, interview research can make up for the shortcomings of quantitative research, especially in the implicit aspects of professional emotion and professional will, which can be more fully understood and analyzed by the interview survey method. Among them, the word frequency analysis of the four dimensions of professional cognition, professional emotion, professional will and professional behavior reflected in the interview text explores the key influencing factors that affect the professional identity of preschool education students.

4. Data Sources and Interview Process

Through interviews with 13 representative students from primary and junior colleges and universities in Hubei Province, including 2 boys and 11 girls, the span from freshman to senior year is reflected. The basic information of the interviewees is shown in Table 1. According to the research plan, the collection of interview data lasted 3 months, and each interview time for each person was between 10 minutes and 30 minutes. Nearly ten thousand words of interview texts were compiled. The author converts the interviewees’ responses into text for subsequent textual analysis.

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<th>Table 1: Basic information of interviewees (N=13)</th>
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5. Analysis of Interview Results

5.1 Research Methods and Research Tools

This research mainly uses word frequency analysis and co-word network analysis, and uses ROST CM6 software (see Figure 1) to analyze the interview text, which is a content mining analysis system developed by the ROST virtual learning team of Wuhan University. The system can perform intelligence analysis, content analysis, text analysis and knowledge processing, and can collect data such as chat, records, Weibo, search engines and web pages, and can perform clustering, classification, word frequency, word segmentation, social network and semantic network analysis on various types of texts[20]. ROST text mining software can perform word frequency, clustering, classification, sentiment analysis on various texts[21]. The word frequency statistics in this article refers to counting the number and frequency of occurrences of each word in a text, which has developed into a scientific quantitative research method. The word frequency statistical analysis can see the essence through the phenomenon, and has certain accuracy and objectivity, systematic and standard, so it is widely used in the research of
many disciplines in the field of humanities and social sciences[22].

Figure 1: The main interface of ROST CM6 text mining analysis software

5.2 Analysis Framework of Interview Text

This research is mainly based on the analysis of the interview text data. Due to personal habits or mantras that appear inadvertently under the influence of external factors, or function words or synonyms that are irrelevant to the research content, the first step is to screen and process the interview text. The second step is to perform word segmentation, and the interview text is imported into the ROST CM6 text mining analysis software in .txt file format, and the word segmentation is performed in the functional analysis. The third step is to import the word segmentation file obtained after word segmentation into the analysis software, through the word frequency analysis in the text, the interview texts are arranged in the order of word frequency, so that you can know what the interviewees are mainly concerned about or the angles of concern. The fourth step is to carry out the sentiment analysis of the interview text, in this process, the positive emotions, neutral emotions and negative emotions implied or expressed are deeply excavated and analyzed to fully understand the professional emotions of the interviewees. The analysis process is shown in Figure 2.

Figure 2: Analysis framework of interview text

5.3 Result Analysis

5.3.1 Overall Analysis of the Interview Text

The high-frequency word text was formed after the interview text was tokenized by ROST CM6 text mining analysis software. Table 2 is the top 20 high-frequency words in the interview text. Among them, “preschool education” is mentioned most frequently, which also shows that the interviewees have been expressing related expressions around “preschool education” in the process of interviewing their identification with the preschool education profession; followed by “learning”, “knowledge”. Words such as “psychology”, “course”, and “education” indicate that the interviewee is concerned with the learning of professional knowledge and skills, which is a concrete manifestation of professional cognition, and the second position of “learning” also indicates that the interviewers pay more attention to their own learning experience. For example, classmate B said, “I was initially attracted by dance piano, and then I was fascinated by early childhood education and psychological hygiene. I will gradually learn more about preschool education-related content or policies.” Student C also mentioned that “in order to understand a knowledge point, I read a lot of books. I will also read more in my spare time to enrich myself.” In addition, from the words such as “development”, “direction”, “future”, “planning”, “clear” etc.it can be seen that students majoring in preschool education will also consider their work after graduation on the basis of their own learning and development, and at the same time link their own development with the knowledge and skills required for work, so that students in their usual majors are more involved in the learning of knowledge and skills. For example, in an interview with “your favorite subject”, student C said, “My favorite subject is ‘Preschool Psychology’, this course allows us to better understand the basics of children’s psychological development Laws and characteristics of preschool children’s psychological development at different ages, master the development of preschool children’s cognition, emotion, personality, language, and sociality and related theories and theories, and lay a solid psychological theoretical foundation for preschool education students to study other courses. At the same time, it will provide help for students to solve practical problems in educational work in the future.” Student F also mentioned, “I think about the employment direction and targeted learning of preschool education major, I think it is like early childhood psychology, I usually listen very carefully. Because after employment in the future, what we need to do most is not to teach some very professional learning and research, but to accompany children to grow up and learn some things that they should learn at this age. At this time, psychology can make us very happy. It is easy to understand them.” There are also “society”, “school”, and “teacher” as the main perspectives. It can be seen that the main factors affecting the professional identity of preschool education are mainly reflected in these aspects which is a great inspiration for the subsequent proposed effective measures.

The above is a word frequency analysis based on the interview text to explore professional cognition and professional will in the framework of professional identity. In order to have a clearer understanding, the author uses the word cloud graph generator to generate high-frequency words (top 50) according to the number of occurrences. The cloud map (see Figure 3), the principle is that the greater the number of words appear, the larger the font display.
Some of the interviewees mentioned that there are problems in the school’s curriculum settings that affect actual learning. For example, J students who are entering the university mentioned that the relevant curriculum settings should be different from undergraduate courses. She suggested that “the curriculum should be designed according to the needs of students and society. In order to take into account, the recent development area of students, such as: developmental psychology courses, which are too familiar to be familiar, they can be upgraded by one level and one level higher. I hope the school can consider the actual situation of the students and arrange courses separately for the advanced courses. In addition, classmate A mentioned: “I have a strong interest in learning preschool education courses, and I am good at summarizing learning experience, constantly improving learning methods, integrating theory with practice, and will make unremitting efforts. The learning atmosphere of preschool education is very beneficial to our students. The influence of professional identification is very obvious, a good professional learning environment, sufficient teaching resources and platforms are conducive to our confidence and interest in professional learning!” Therefore, from the school’s point of view, the talent training and curriculum setting of preschool education majors, as well as the school’s learning environment and so on affect the learning and development of preschool students to a great extent.

From the central words such as “clear”, “ability”, “able”, and “effort”, it can be seen that the respondents can continue to learn and improve their own literacy, and are willing and believed to be competent in early childhood education. For example, classmate B “My future employment is very clear that I want to be an excellent people’s teacher who can cultivate a good next generation for the people. I think the future employment prospects of preschool education are very bright.” Student M mentioned: “I am quite clear about my future employment direction, because I love the profession of teaching, and I think girls should find a stable job, so I will take up the job of teaching in the future, and I hope that through hard work and hard work, I can reap the fruits of my work and serve the motherland. More power in education.”

From the central words such as “society”, “teachers”, and “parents”, it can be seen that the influence of the subject’s perspective on the preschool education professional identity is mutual. The parents who came here are more recognized by the teachers of preschool education, and classmate B also mentioned that “the recognition of preschool education in today’s society is getting higher and higher, preschool education is getting more and more attention from all walks of life, and people are increasingly pursuing higher quality of preschool education.” And “Parents agree and
unconditionally support my studies, and respect preschool education as a discipline.” Student C mentioned that “Parents are very supportive of my choice. They are also very optimistic about this industry and the expectation for me is to make me a teacher of the people.” In addition, classmate 1 mentioned the influence of preschool education teachers on him, thinking that the teachers are “contagious and vivid in class”. “The teachers are patient, positive, strict and responsible, the common characteristics are patience and tolerance, and will greatly solve the questions raised by students, help students find answers, or solve students’ confusion.” Therefore, preschool students on the basis of recognizing the advantages of the major, also need a good environment created through the joint efforts of teachers, schools and society.

6. Conclusion and Inspiration

In this study, through interviews with 13 students majoring in preschool education in more than ten primary and junior colleges and universities in Hubei Province, we obtained relevant data on the identity of preschool education majors. In the process of analysis and research, ROST CM6 text mining analysis software was mainly used to conduct text processing, word segmentation, social network and semantic network analysis, and sentiment analysis on the interview text. The purpose is to understand the status quo of preschool education textbooks and college students’ professional identity under the framework of preschool education professional identity theory, the factors that may affect professional identity, and try to put forward effective countermeasures to improve professional identity.

Therefore, according to the above research, the following implications are drawn:

First of all, the professional identity of preschool students is generally at an upper-middle level, and there are different perspectives in professional cognition, professional emotion, professional will and professional behavior. Among them, in terms of professional cognition, students majoring in preschool education pay more attention to the knowledge and skills that they have learned and can be useful in their future work. The school’s talent training goals and curriculum settings can directly affect students’ professional identity to a large extent. Professional emotions are mostly positive emotions, which is influenced by the increasing attention paid to preschool education. From this, it can be seen that one’s own understanding and emotions that can be overcome in the learning process are also positive. In terms of professional will, students can realize that the knowledge and skills they have learned can play a role in the actual teaching process.
whether in the process of studying in school or in the process of off-campus internship, which can in turn affect the difficulties they encounter in the study of professional courses. The firm can actively think about and solve problems, and can also correct the attitude of the current preschool education major in terms of employment. In terms of professional behavior, although the behavioral performance could not be seen directly in this study, the interview process of the interviewees can also reflect that they can express their favorite course content in the process of professional learning, and can choose relevant course which they interested, content as a specialty advantage, such as piano, dance and other practical courses.

Secondly, in the process of analyzing the social network and semantic network of the interview text, we can find important factors that affect the professional identity of preschool students, such as social recognition, family support, school talent training mode and teachers’ teaching methods. Factors such as their own understanding of the preschool education major will affect the students’ sense of identification with the preschool education major. Therefore, the main factors of society, schools, families, teachers and individuals are formed, which lays the foundation for subsequent effective countermeasures that can improve professional identity.

When pursuing the development goals of “golden courses” and first-class curriculum construction in colleges and universities, students, as the ultimate beneficiaries, have the most say in the presentation of the effects of curriculum construction. Among them, students’ professional identity should be regarded as an important evaluation index that cannot be underestimated. This article starts from the students majoring in preschool education in Hubei Province, adopts qualitative interview investigation and analysis, and finally analyzes and summarizes the samples. To a certain extent, it can explain the main forms and angles of students’ professional identity. Through the analysis process and results of this study, it will contribute to the construction and development of preschool education.

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