

A QUALITATIVE ANALYSIS OF COLLEGE STUDENTS' PROFESSIONAL IDENTITY IN HIGHER VOCATIONAL COLLEGES

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ABSTRACT

With the upgrading and adjustment of China's industrial structure, the demand for high-quality skilled personnel is also increasing, and under this situation, higher vocational education in China is undergoing an important educational reform, a large number of new majors appear, and old majors are merged, reorganized or optimization. This series of major adjustments have triggered changes in the professional identity of students in higher vocational colleges, and the professional identity with their majors will greatly affect students' learning engagement, and thus the formation of their competency levels. Based on the Ground Theory, this study, through interviews with students from different vocational colleges and universities with different majors, repeated comparative analysis, coding by level, and summarization, found five major factors affecting students' professional identity in higher vocational colleges and universities and put forward suggestions around these factors for higher vocational colleges and universities to improve students' professional identity level.

Keywords: Higher Vocational Colleges, Influencing Factors, Grounded Theory, Professional Identity,

1.0 INTRODUCTION

Since 2017, China's economic development has entered the stage of building a modern new economic system. In order to encourage innovation and enhance industrial competitiveness, the state has actively promoted the transformation and upgrading of industrial structure, and the demand for talents has also undergone great changes. The goal of higher vocational colleges in China is to cultivate high-level skilled talents who meet the needs of social and economic development. Therefore, the transformation and upgrading of China's industrial structure lead to the change of major settings and major group construction in higher vocational colleges. The emergence of new majors and the adjustment of a series of major settings in higher vocational colleges, such as the merger, reorganization or optimization of old majors, have led to changes in the degree of professional identity of students in higher vocational colleges. In the process of teaching and daily student management, we found that

some students lacked the motivation to learn due to their lack of professional identity, their motivation, and engagement to study are reduced, and they even become averse to study, expressing their resistance to learning by being late and absent from class. These students often have difficulties in graduation and employment. Even if they can be successfully employed, they will not be able to do their jobs well because of their poor professional foundation. Therefore, in the special period of the transformation and upgrading of China's industrial structure and the changes of the majors of China's higher vocational colleges, it has certain practical significance and research value to study the professional identity of students in higher vocational colleges.

"Identity" is the core concept of studying professional identity, first proposed by the psychologist Freud. Freud believed that identity was a process of psychological convergence between individuals and people or groups. Erikson(1968) has widely applied the concept of "identity" in psychological research and proposed that the value orientation generated by contact with the world in college will accumulate great power for the future individual's development. According to Henning(2001), professional identity is a subjective feeling that keeps a balance between students' minds and they're major.

Although they are all researches on "professional identity", the perspectives of researchers in different countries vary greatly. Different from China, overseas academic circles mainly conduct research on occupations such as doctors, lawyers, psychological consultants, and teachers, focusing on the influence of "professional identity" on individual career development or dealing with work affairs. For example, Mawhinney (1997) started from the perspective of building professional identity, it believes that the professional identity of foreign-trained teachers is the difference between the professional identity constructed by the individual and the social evaluation of the career. Watson (2006) believes that the importance of professional identity lies in its relationship with professional knowledge and professional action, which is the embodiment of the value of people's professional identity. Folsom B and Reardon (2003) found that career planning courses played a significant role in improving college students' professional identity. Jeffrey (2012) found that the working group has strong cohesion and positive values, which can have a positive influence on professional identity. If the peer work effect is a poor and social recognition of the profession is low, it will have negative influence factors on professional identity.

In China, scholars' research on "professional identity" mainly focuses on students of different educational levels, focusing on the changes and influences of students' attitudes to major in the process of professional learning. For example, Dong Jimei, etc.(2020) found that when students in secondary vocational schools feel disgusted with their majors, their degree of professional identity decreases, and they become tired of learning. Chen Li etc.(2018) found that students in normal schools of special education have a high degree of professional identity and high learning enthusiasm. Zhang Jiajiang etc.(2018) argued that students' identity with their major had a significant positive impact on their self-efficacy.

Following the research ideas in China, this study defines "professional identity" as students' exploration of major value and analysis of their own matching degree. Based on Grounded Theory, this study analyzes the influencing factors of professional identity of students in higher vocational colleges and explores strategies for improving professional identity.

2.0 RESEARCH METHODS

2.1 Research Design

Based on the Grounded Theory research method, this study analyzes the factors influencing the professional identity of students in higher vocational colleges and proposes effective improvement strategies. First, through the review and discussion of the existing literature, the research questions, research perspectives, research levels, and objects were defined, and the design of sample sources and sampling methods were initially completed. Then, according to the design plan, the data collection was carried out in the form of semi-open in-depth interviews. The data were analyzed, successively compared, reorganized, and conceptualized through three stages of coding. In this process, through writing memorandums, we explored the relationship between data, categories, and concepts, and finally established a new theory of the relationship between concepts and concepts that were more abstract and generalized. Finally, a theoretical saturation test was carried out to generate research theories and related suggestions in a saturated state where no new concepts or categories appear.

2.2 Research Objects

The study focuses on Guangdong Province of China, a region with rapid economic transformation and upgrading, and selects a number of higher vocational colleges at different levels of development in the region. Various types of majors, such as traditional majors, new majors established in the past two years, popular enrollment majors, and outstanding majors, were selected from them as test samples. The selection of majors took into account both science and technology and humanities and social science majors, as well as different grades so that the tested student samples were widely representative. A total of 12 testers, including 7 males and 5 females, were selected for this study, and the basic information of the sample students is shown in Table 1.

Table 1: Demographic information of the test subjects

variable	level	frequency / number	percentage /%
gender	male	7	58.33
	female	5	41.67
grade	Freshman	6	50
	Sophomore	6	50
major categories	literature	3	25
	management	3	25
	economics	1	8.33
	engineering	5	41.67

Source: Compiled from this study

2.3 Interview outline

This study used semi-open interviews for data collection. After the interview outline was drawn up, a pre-interview was conducted to test and refine the interview outline. The formal interview outline is as follows:

1. Why did you choose this major? What is the reason?

2. After a period of contact, do you think this major is the same as you originally imagined? How do you feel?
3. Please talk about your views on the major you are studying, and you can talk about the people, events, and any other things you have come into contact with in the process of learning.
4. What do you know about the employment prospects of this major?
5. If you are asked to engage in professional-related work after graduation, would you be willing to do it? What is the reason?
6. How do you feel about your performance in professional knowledge learning? Did you encounter any difficulties? What kind of support do you want?
7. What do your relatives and friends around you think about your major?

2.4 Interview Process

From June 5th to July 1st, 2022, this study successively conducted semi-open interviews with 12 students from different higher vocational colleges and completed the recording and transcription of the interview data. In order to ensure the diversity and representativeness of the samples, the interviewees were roughly equal in number of male and female, from different grades, different majors, and different schools. The interviews were conducted in the form of face-to-face interviews and telephone interviews, and the average time spent on each interview was over 30 minutes. With the consent of the interviewees, this study recorded the content of the interviews by means of audio and text and recorded every original sentence of the students. During the interview process, the same questions were asked according to the outline to ensure that the interview theme was consistent. When valuable information emerges during the interview, the authors would ask follow-up questions to uncover the most deeply valuable content. In the end, a total of nearly 20,000 words of original Chinese interview data were obtained.

3.0 RESULTS

This study randomly selects 10 samples from 12 semi-open in-depth interview samples and uses the grounded theory research method to analyze the collected original interview recordings. First, the original content of the interviews is organized, numbered, transcribed, and analyzed step by step. Then, complete the open coding analysis, the spindle coding analysis, the selective coding analysis, and gradually form the theory. Finally, a theoretical saturation test is performed. The specific data analysis process and results are as follows:

3.1 Open coding

Open coding refers to the sentence-by-sentence analysis and coding of the original interview data to form an "initial category". First, encode the text to generate a large number of encoded nodes displayed in a list, which is convenient for subsequent induction, analysis, and elimination. After coding the respondents' original interview text line by line, a total of 136 nodes were obtained in this study. The interviewee number is A + interview order, and the interview data node number is B + coding order. For example, the 10th content node of the first interviewee can be recorded as A1B10. In the open coding categorization process, this study eliminated repeated original sentences with ambiguous meanings. After analysis, 19 initial categories are finally abstracted. Since there are too many initial concepts and initial

categories, this paper selects the first 10 of the 19 initial categories as examples, as shown in Table 2, and selects 3-5 original sentences for each category as examples.

Table2: Open coding process (partial presentation)

original sentences (initial concept)	initial categories
A1B13 My parents actually do not agree with me to study this major, she thinks it will be difficult to find a job after finishing the study (the parents are worried about the difficulty of finding employment)	parent's point of view
A3B15 My parents think it is good to do foreign trade here in Guangdong, and there are many opportunities (the parents think there are many employment opportunities)	
A8B14 My mother did not agree with it at first. She felt that it was not safe to work as an electrician after graduating from this major (parents worry about employment security)	
A3B2 When I was choosing a major, I asked my high school teacher, and he analyzed my grades, hobbies and school rankings and helped me choose my current major(High school teachers give guidance on major selection)	teacher's point of view
A10B2 My high school teacher told me about this major. He thinks that this major has a wide range of employment opportunities and good employment prospects, and the major is relatively popular (high school teachers are optimistic about the employment prospects)	
A5B3 When I was in high school, I heard the teacher say that people who study finance generally have higher wages (high school teachers are optimistic about employment wages)	
A2B5 I have talked to some relatives of the same age, and they all said that this major's development is still very good (relatives of the same age are optimistic about major's development prospects)	peer group perspective
A8B15 A cousin of mine told my mother that the employment prospects of this major are relatively good, and it is easy to find a job (cousin is optimistic about the employment prospects of the major)	
A9B19 My friend thinks that I major in electrical automation, and I will be doing air conditioning, computer hardware or software maintenance in the future (friends' understanding of employment direction)	
A6B1 Hotel Management contains knowledge of many industries, from cooking technology to project management, I can learn many professional knowledge (the course content is rich)	Curriculum construction level
A2B8 I think our courses are well arranged. In our freshman year, we first took courses in English majors such as comprehensive English, English, speaking, listening, and grammar, so that we could lay a solid foundation for English majors. In the second year of sophomore year, we began to learn some business knowledge, that is, courses such as international trade, business correspondence and bill making. Now there are also cross-border e-commerce courses (the course arrangement is reasonable)	
A10B14 I think the learning difficulty is above medium (the course difficulty is moderate)	
A6B2 Most professional courses adopt a teaching method that combines theory and practice, so that students can better understand the theoretical knowledge in textbooks, so as to better master relevant professional knowledge (focusing on the combination of theory and practice)	
A9B3 Electrical and Automation majors cover a lot and have dabble in other majors, but the course content is too broad and not deep enough. This situation is also a pain point for most specialist majors (the course content is not very professional)	

A3B8 Last year, there was a teacher who taught comprehensive English who was not very good at lecturing. He always engaged in group assignments, and then he was still engaged in small games (the teacher's professional level is not high)	Teacher team construction level
A4B5 If any questions are raised, the teachers will explain to us carefully and patiently (the teachers are patient)	
A10B4 Most of our teachers will publish learning tasks and online course resources on Learning Pass (Teachers have awareness of online teaching)	
A3B9 This year's teachers are generally very good, the progress is not particularly fast, and the arrangements are very good (the teachers arrange the teaching progress reasonably)	
A6B3 The professional quality of teachers in professional courses is very high, and they can know the students' understanding of knowledge in time (teachers pay attention to students' knowledge mastery)	
A4B6 The training conditions of the school are also very good, with special training buildings and equipment (with special training venues and equipment)	Training classroom construction level
A7B4 In terms of training conditions, the School of Automotive Engineering has complete teaching practice facilities for teaching use (complete teaching practice facilities)	
A9B9 In terms of the training conditions of our school, I think it is still relatively sufficient (the training room has sufficient conditions)	
A2B21 Our school's business English major is still quite strong in the country (the major is well-known in China)	Reputation of the major
A9B11 I learned that the electrical automation major is relatively strong in our school, so I chose this major (the major is well-known in the school)	
A2B12 There are also English CCS clubs, etc., which are very good for students (Professional student societies)	extracurricular activities
A3B10 My major will also hold some competitions, such as business skills (there are extracurricular competitions)	
A10B15 The college can organize some competitions in this area, so that students can be more actively involved in professional learning (improve student participation)	
A5B7 The initial employment rate of graduates is over 90 (high initial employment rate)	Expected employment rate
A3B13 I feel that 70% to 80% of graduates majoring in business English are doing professional-related work (high employment counterpart rate)	
A4B7 Compared with other popular majors, the competition pressure after graduation is relatively low (employment competition pressure is low).	
A8B11 The income depends on your work experience. The longer you work, the salary should also increase (the salary increases with the number of years)	Expected salary level
A10B10 If you continue to further study, when you have a higher education, the salary will increase, and it will reach seven or eight thousand (the salary increases with the degree)	
A2B17 Many graduates go to work in the international trade industry, earning a lot of money, and some can earn 20,000 to 30,000 yuan a month. (High salary level for graduates)	

Source: Compiled from this study

3.2 Spindle coding

On the basis of sorting, analyzing, and summarizing the original interview materials sentence by sentence, and obtaining the initial category, this research establishes a further correlation between the initial category and the initial category through cluster analysis, and finally

obtained five main categories including the views of significant others, major's development level, employment prospects, social evaluation, and self-characteristics, as shown in Table 4:

Table 3: Spindle coding process

main category	the corresponding initial category
the views of significant others	parent's point of view
	teacher's point of view
	peer group perspective
major's development level	Curriculum construction level
	Teacher team construction level
	Training classroom construction level
	Reputation of the major
	extracurricular activities
employment prospects	Expected employment rate
	Expected salary level
	Room for expected career development
	Expected work environment
social evaluation	Social talent needs
	National Policy Orientation
	Adaptability to social and economic development
self-characteristics	personal interest
	personal Character Traits
	personal professional learning foundations
	personal learning ability

Source: Compiled from this study

3.3 Selective coding

After correlating and integrating 19 different initial categories to obtain the main axis code, through selective coding analysis, the 5 main categories formed by the main axis encoding are further correlated, and further abstracted and determine the core category that can reflect the typical relationship and internal connection between the main categories. After the continuous comparison and analysis of the five main categories formed, this study established the core category of "professional identity of college students in higher vocational colleges".

3.4 Theoretical Saturation Test

In this study, 10 were randomly selected from the original materials of 12 interview samples for three-level coding, and a theoretical model was obtained. According to the above three-level coding process, this study analyzes and summarizes the original data of the remaining two interview samples, and conducts a theoretical saturation test. The test results show that the original interview data of these two respondents did not produce new concepts and categories, and the categories formed by their coding were completely contained in the constructed theoretical model. As a result, the theoretical model constructed in this study has reached a saturation state.

4.0 DISCUSSION AND SUGGESTION

4.1 The motivation of major choice largely determines the level of professional identity and is the endogenous driving force of professional identity.

The research results show that the motivation for students' major choices can be roughly divided into the following three categories. First, students choose majors out of interests and hobbies. Such students usually have been in contact and study in the selected major for a period of time, resulting in a certain degree of emotional sustenance. Therefore, their level of professional identity is high for them. They have positive performance in professional learning after enrollment and have relatively clear professional learning goals and development plans. Second, students choose majors out of future career development. Such students generally have a relatively extensive investigation before choosing a major, have a certain degree of major cognition, and make a major choice after rational analysis. Although students have the rational motivation to learn and lack emotional sustenance for the major, they often need the stimulation of external forces in order to gradually establish a higher level of professional identity. Third, students choose their majors blindly following others or their parents, or for reasons such as major adjustment, which is passive and random. These students not only lack emotional sustenance for the major but also lack cognition of the major. They will be confused for a period of time after enrollment if they are not properly guided, and there will be easily the phenomenon of professional identity differentiation, that is, some people have always been unable to establish professional identity independently, and then choose to change majors.

Although the motivations for students to choose their majors to vary, to a large extent determines the initial level of professional identity, and is also the basis for students to gradually establish and strengthen their professional identity. Therefore, the relevant staff of majors should pay attention to analyzing students' major choice motivation, and take different measures to guide students to establish and gradually strengthen professional identity according to students' different initial professional identity states.

4.2 The overall level of major development affects professional identity, which is the core external factor to strengthen professional identity.

The research found that no matter what the initial professional identity level of students is, the personal experience of various professional-related information acquired during the learning process after enrollment will greatly affect the follow-up development of the professional identity level. The study found that the professional self-confidence of students in high-level higher vocational colleges is significantly higher than that of ordinary higher vocational college students, and the professional identity of outstanding majors is significantly higher than that of ordinary majors. It can be seen that factors related to the overall level of majors development, such as the degree of optimization of majors curriculum, the teaching level of teachers, the conditions of practical training and internship, the level of standardization of teaching management, the richness and participation of majors activities, career guidance and employment level, greatly affect the improvement of students' professional identity level, and it is especially important for students who belong to the above-mentioned second and third types of major choice motivation to establish and strengthen professional identity.

So the professional identity of students is closely related to the development level of the major itself, and they promote each other. The level of major development is a controllable factor for higher vocational colleges. Therefore, higher vocational colleges should attach importance to strengthening major construction and take measures to effectively improve the overall development level of the major. First, it is necessary to continuously optimize the curriculum of majors, and build a curriculum system that not only meets job requirements but also promotes the development of students' professional ability. Second, strengthen curriculum construction and reform, build high-quality courses, and develop high-quality curriculum resources. Third, according to the characteristics of students, continuously improve teaching methods and means to improve teaching effect. Fourth, strengthen the construction of teachers' teams, establish a regular training mechanism for teachers, a guidance mechanism for experienced teachers to fresh teachers, to improve the overall quality of the teachers. Fifth, improve the construction of practice and internship bases inside and outside the school and create more opportunities to improve students' practical level. Sixth, develop diversified majors activities to enrich students' life in college. Seventh, establish a standardized teaching management mechanism and improve student management. Eighth, Strengthen career guidance. In the enrollment publicity and career guidance class, it is necessary to strengthen the introduction of future career directions, employment rates, salary levels, career advancement space, working environment, etc. for students of different majors, and provide students with comprehensive employment services. Efforts to improve the employment rate and employment level, to help students build confidence in employment.

4.3 Social evaluations of the majors are uncontrollable external factors that affect professional identity

It is found that the professional identity of students in higher vocational colleges is influenced by the social evaluation of majors, that is, whether the social demand for students of majors is strong, whether the national policies tend to develop the relevant industries corresponding to majors, whether the students cultivated by majors meet the needs of economic and social development, etc. Such factors are uncontrollable external factors for majors and students, therefore, for higher vocational colleges, it is necessary to actively cater to these uncontrollable external factors. First of all, vocational colleges should consider the major settings from the perspective of social needs, not from the perspective of disciplines, and regularly adjust the major settings according to the changes in economy and society to ensure that the major settings meet the market needs. At the same time, the majors should keep up with the corresponding industry changes, cooperate with leading enterprises in the industry to educate people, jointly develop the curriculum system and teaching content, etc. to ensure that the students cultivated by the majors meet the job requirements of the industry, so as to build students' confidence in the majors and enhance their professional identity level.

4.4 Controllable external factors that affect professional identity can be similarly divided into health-care factors and motivational factors, which have different principles of influence on professional identity.

Herzberg's two-factor motivation theory divides the factors that cause people to be motivated to work into health-care factors and motivational factors. He believes that only motivational factors can bring people satisfaction, while health-care factors can eliminate people's dissatisfaction but not bring satisfaction. It is found that among the many factors affecting the

professional identity of students in higher vocational colleges, a phenomenon similar to the two-factor theory exists, that is, some factors that do not meet students' expectations will obviously harm professional identity while meeting students' expectations will not cause the level of professional identity to increase, such factors belong to health-care factors, and the typical ones are the systems and measures of teaching management and student management. Other factors, such as teachers' teaching level, graduates' or seniors' evaluation of the major, and employment level, are motivating factors that can significantly improve professional identity if students are satisfied.

Therefore, majors should pay attention to distinguishing the categories to which the external factors affecting professional identity belong, and take corresponding measures for different categories, not only to ensure the degree of basic satisfaction of health-care factors but also to improve satisfaction with motivational factors as much as possible, so as to achieve the optimal effect of enhancing students' professional identity.

REFERENCE

- Kemph J P.Erik H. Erikson. Identity, Youth and Crisis. (New York: W. W. Norton Company, 1968).
- Olesen S, Henning. Professional identity as learning processes in life histories. *Journal of Workplace Learning*, 2001, 13 (7/8) : 290-298.
- Mawhinney H, Fengying X U. Reconstructing the Professional Identity of Foreign-Trained Teachers in Ontario Schools. *TESOL Quarterly*,31(3),1997,632-639.
- Watson C. Narratives of practice and the construction of identity in teaching. *Teachers & Teaching*, 12 (5), 2006, 509-526.
- Folsom B , Reardon R . College Career Courses: Design and Accountability. *Journal of Career Assessment*,11(4),2003, 421-450.
- Jeffrey L, Brunton M . Professional identity: How communication management practitioners identify with their industry. *Public Relations Review*, 38 (1) ,2012,156-158.
- Dong Jimei, Liu Wenjuan, Zhou Chen, Sun Yinghong, Chen Gongxiang. Secondary vocational students' perception of discrimination and learning burnout: The mediating role of professional identity and psychological capital. *Special Education in China*,4, 2020,76-80.
- Chen Li, Yang Qiong. Research on the relationship between professional identity, learning burnout and learning efficacy of special education normal students. *Special Education in China*, 39 (01), 2018,45.
- Zhang Jiajiang, Zhao Yi. The relationship between professional identity and self-efficacy among college students majoring in special An Example of The Evolution of The Leshan Normal University. *Journal of Neijiang Normal University*,33(06),2018,7-11.