# Investigation on Professional Identity Status of Guangxi Special Education Normal University Students

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*Abstract:* Select Guangxi Normal University, Nanning Normal University, Guangxi Preschool Normal College special education students as the research object, the status of professional identity questionnaire survey. The results show that the professional identity of Guangxi normal education students is above medium level, and the teaching identity is the highest, which is emotional identity > professional investment > value and development identity > professional identity. There was no significant difference in professional identity among different gender, only child or not and place of origin. Guangxi Normal University has the highest level of professional identity of special education students, followed by Nanning Normal University, Guangxi Preschool Teachers College has the lowest level of professional identity. There are significant differences in professional identity among grade one, grade two, grade three and grade four in each school. On the whole, the highest degree of professional identity in undergraduate colleges is grade one, followed by grade four > grade three > grade two; The level of professional identity in junior colleges declined from grade one to grade three. The significant difference is mainly reflected in the dimension of professional investment. The level of professional identity of special education normal university students with poor family economic status is the highest, which is higher than that of good, very good and average. In terms of professional voluntary, the level of professional identity of other reasons is the highest, followed by the advice of parents and others, and the level of professional identity of independent choice is the lowest.

# 1. Introduction

## 1.1. Research Background

China's Education Modernization 2035, issued by the State Council, calls for the provision of appropriate education for children with disabilities. The state should make arrangements for special education, comprehensively promote the education of school-age children with disabilities, strive to cover all regions, promote the comprehensive development of integrated education, promote the integration of medical and education, and build a team of high-quality professional and innovative teachers. This is closely related to the professional identity level of special education normal university students. The Certification Standards for Special Education Majors issued by the Department of Teacher Work of the Ministry of Education requires graduates to be willing to

engage in special education and recognize the significance, professionalism, uniqueness and complexity of the work of special education teachers. It is mentioned in teacher ethics that teachers should have humanitarian spirit, positive feelings, correct values and views of disabled people, as well as special children development and education views.

Have to study and put forward our country special education students in employment choice some would opt for a career or a career change after a period of special education, caused serious brain drain [1], the part of the reason and special education teachers' own professional identity level, and special education students' professional identity in China generally is the medium level. Professional identity has an important influence on individual's enthusiasm, creativity, affection, participation in learning, understanding and absorption of knowledge and future employment. Therefore, professional identity has an important influence on the study of special education students and the development of special education in the future.

The development level of special education in Guangxi lags behind [2], and a large number of professionals are needed to carry out the work. The investigation on the status quo of special education professional identity of Guangxi normal university students is helpful to further explore part of the reasons for the development of special education in Guangxi, and it is expected to provide data reference for college enrollment, curriculum improvement, teacher teaching, educational practice and the improvement of the quality of special education in Guangxi.

## 1.2. Literature Review

### 1.2.1 A Study on Professional Identity of Normal University Students

Professional identity is individual in contact with the family, school and social environment, gradually recognized and accepted, liked and related professional career, willing to take positive attitude and behavior to learn and explore actively, according to professional career choice, and is willing to take professional or related work as individual lifelong development goals and a series of cognition, emotion, motive and behavior

A total of 2135 results were obtained by searching "professional identity" on CNKI, and searching for "professional identity of special education" "Professional identity of special education normal students" obtained 30 and 10 results respectively. In contrast, there are few relevant studies, and there are relatively few studies on professional identity of special education normal students in Guangxi. According to the relevant research results, the professional identity level of Chinese special education normal university students is generally average. Hu Jinping pointed out why graduates of special education major do not choose careers related to special education in terms of employment, because of the severe employment situation and social background, most students of special education major have a low level of professional identity [3]. Xu Shuai put forward that the low level of students' professional identity is an important internal reason for the brain drain of special education [4]. Hu Yuting proposed that students' professional identity should be further improved to reduce brain drain [1].Wu Junhua proposed that appropriate measures should be taken to improve students' professional identity and encourage undergraduates majoring in special education to love and devote themselves to special education in their future careers, so as to reduce the negative impact of brain drain [5].Yang Qing pointed out that the level of professional identity in professional learning not only directly affects the enthusiasm and initiative of normal university students, but also indirectly affects the ability and attitude of normal university students in the future education work [6]. The formation of professional identity is gradual. Reilly believes that the positive construction of students' professional identity lies in you can do that in college [7].

### 1.2.2 A Study on the Factors Influencing the Difference of Professional Identity Level

In recent years, the research on professional identity of special education normal students mainly discusses the comparative analysis of differences in professional identity of special education normal students in grade, sex, volunteer choice and other aspects.

Guan Chunlan and others took the normal students majoring in special education in two national key normal universities as the research object to carry out professional identification. The survey results show that there is no significant difference in the professional identity of normal students in special education between the two schools, but there are significant differences in gender and extremely significant differences in grade. Both schools are at the medium level. She believes that the reason is that the students have low emotional value and high value development identity of special education major, the influence of students' personal factors, problems in curriculum and teaching, and the low level of professional identity affect the students' professional investment [8]. According to the research results of Xiu Yunhui, the professional identity of students majoring in special education in his research institutions is of average level, and there are significant differences in grade and academic performance. He believes that the influencing factors include grade, voluntary choice and academic performance [9]. Liu Si's research results of professional identity are also at the medium level, but there are great differences in various variables, and there are significant differences in grade and voluntary choice. She believes that the reason is that special education teachers' social status is not high, their professional interest is not large, the curriculum is not in line with expectations and their psychological satisfaction is low [10]. Li Hong's research results is also a significant difference in grade and academic achievements, she thought that is because of the development of special education is not synchronized with the development of society, the course content is not interested in aging causes students, teachers, teaching attitude leads to poor students to this professional emotions were low, backward educational condition cause the student to the professional were low [11]. In his research on the relationship between professional identity and learning burnout, and between professional identity and learning efficacy of special education normal students, Chen Li learned that professional identity is positively correlated with the level of learning efficacy, that is, students with high professional identity of special education normal students learn efficiently students with low sense of professional identity have a relatively low sense of learning efficacy. Students with high sense of professional identity have a significantly lower learning burnout than students with low sense of professional identity [12].

### 1.2.3 Research on Methods to Improve Professional Identity Level

Many research results expect that the professional identity level of special education normal university students can be improved in the future. Sun Yumei believes that "professional guidance" courses should be offered when students just enter the special education major, so as to better and faster help the freshmen of special education major form a good professional identity [13]. In her research, she found that a school opened the course of special education professional guidance and career planning after the freshman stage. Most students reported that the course can well solve their confusion in professional understanding, and can communicate more with professional teachers and obtain relevant professional resources in a stable time. Feng Wei believes that it is necessary to continuously strengthen the professional education of special education normal university students, implement some effective measures to improve their professional identity level, and promote students to obtain more subjective happiness in the study of special education. Therefore, the existence of teachers is very important. It is the responsibility of teachers to guide normal students majoring in special education to establish a correct outlook on life and professional values. They

should also have a relatively clear understanding of the professional development prospects and trends of normal students majoring in special education, and setting up courses in career planning and guidance is helpful to them [14]. Cai Chenmei believes that normal university students should cultivate good self-cognition ability on the basis of learning to reflect, and promote the growth and maturity of normal university students in professional self. Self-reflection is an important internal way and way for normal university students to develop themselves, which can help them establish a firmer professional identity [15]. As for the phenomenon of low professional identity of students who choose to volunteer independently, Liang Cailing believes that the relevant departments should further improve the corresponding system in the college entrance examination enrollment, so that students can choose the majors they want to learn as much as possible when filling in their volunteers, and families should guide their children. They should not only look at the present, but also look to the future, so that students can rationally choose the majors they like and suitable for themselves, develop their strengths and avoid their weaknesses, Instead of blindly requiring students to apply for the sought after major [16]. Wang Baozhu and others proposed that in order to improve the professional identity of normal students in special education, we should first improve the enrollment system of special education, and pay attention to the test of candidates' personality. When inspecting special education candidates, colleges and universities should not only look at the students' college entrance examination scores, but also take the personality evaluation results as a basis for enrollment. The second is to do a good job in the popularization of special education knowledge, so that other people view special education correctly. Finally, college special education teachers should pay attention to the cultivation of students' self-confidence and help them establish good professional self-confidence.[17] LiuJun and others on the sports college special education professional students after the study of professional identity, puts forward some Suggestions of needle to sex strong, he think the school should strengthen the professional attention and support, increase of special-education professional phase locked into, and perfect the special-education LABS and the disabled sports related equipment and venues, this will help special-education students more intuitive understanding of special education major [18].

## 1.2.4 Review

The research on the professional identity of special education normal students in China has attracted attention. The influencing factors are relatively complex, and the brain drain caused by the low level of professional identity has a negative impact on the development of special education. However, most studies believe that the professional identity of special education normal students needs to be improved, and countermeasures should be actively adopted. In terms of research methods, the author used different questionnaires, comparative factors, local differences, and comparative analysis results, but most of the differences are consistent, such as significant differences in grades, and the influencing factors are also consistent, such as low social status of special education. What is better is that more and more scholars have paid more and more attention to the improvement of professional identity, but it is a difficult process to improve the level of professional identity, which requires support and promotion from various aspects. In order to train better special education teachers, it is necessary to improve the professional identity of special education students.

After consulting the literature, it is found that there are not many studies on the professional identity of normal students of special education in schools at different levels. Therefore, we should take normal students of special education in Guangxi as the research object to investigate the current situation of their professional identity. In view of the fact that there are only three colleges and universities in Guangxi that offer the specialty of special education at different levels, to further understand the current situation and influencing factors of professional identity of special teachers

and students in Guangxi, and put forward relevant suggestions to improve students' professional identity, reduce the brain drain and promote the development of special education in Guangxi.

To sum up, the level of professional identity has a certain impact on the study and future occupation of special education normal university students, and even affects the development of special education. Based on this, this study is dedicated to special education students' professional recognition with the status quo of the research in Guangxi, find out the cause of influence, and try to put forward relevant Suggestions and expectation for special education students' professional identity in Guangxi render their ascension, as well as the special education in Guangxi in the recruitment of students, curriculum reform to provide more data for reference.

## 2. Research Methods and Means

### 2.1. Research Object

This study intends to conduct a questionnaire survey on special education students in three colleges and universities offering special education majors in Guangxi, so as to grasp the status quo of professional identity of special education students in Guangxi. The three institutions include the first college (Guangxi Normal University), the second college (Nanning Normal University) and the junior college (Guangxi Preschool Teachers College).Based on what was collected.The details of the questionnaire are shown in Table 1.

Table 1: Demographic Characteristics of subjects (n=322).

| statistic | category | frequency | Percentage |
|---|---|---|---|
| gender | male | 18 | 5.6 |
| | female | 304 | 94.4 |
| The school | Guangxi Normal University | 62 | 19.3 |
| | Nanning Normal University | 125 | 38.8 |
| | Guangxi Preschool Teachers college | 135 | 41.9 |
| grade | In grade one | 78 | 24.2 |
| | Second grade | 99 | 30.7 |
| | The third grade | 106 | 32.9 |
| | In fourth grade | 39 | 12.1 |
| Serving as a student cadre | is | 173 | 53.7 |
| | no | 149 | 46.3 |
| students | Cities and towns | 78 | 24.2 |
| | rural | 244 | 75.8 |
| The one-child | is | 41 | 12.7 |
| | no | 281 | 87.3 |
| Family financial situation | Very good | 6 | 1.9 |
| | good | 27 | 8.4 |
| | general | 253 | 78.6 |
| | poor | 36 | 11.2 |
| Professional voluntary | choose | 157 | 48.8 |
| | Parents and others suggest | 53 | 16.5 |
| | other | 112 | 34.8 |

As can be seen from Table 1, in the questionnaire survey of the three universities, female students are the majority, accounting for 94.4% and male students for 5.6%.In the number of schools, Guangxi Preschool Teachers College is the largest, accounting for 41.9%, followed by Nanning Normal University, accounting for 38.8%, Guangxi Normal University is the least, accounting for 19.3%.In grade distribution, the third grade was more than the second grade, the first grade was more than the fourth grade, accounting for 32.9%, 30.7%, 24.2% and 12.1%, respectively.53.7% were student leaders and 46.3% were not. In the distribution of student origin,

rural household accounts for 75.8%, urban household accounts for 24.2%;In the case of only children, 87.3% were not only children and 12.7% were only children; Among the family economic conditions, most of them were average, accounting for 78.6%, followed by poor, accounting for 11.2%, good, accounting for 8.4%, and very good, accounting for 1.9%.Among the professional voluntary choices, most of them were independent choices, accounting for 48.8%;Followed by others, accounting for 34.8%, a minority choose to follow the advice of parents and others, accounting for 16.5%.

## 2.2. Research Methods

### 2.2.1 Literature Research

Literature research method mainly refers to the method of collecting, identifying and sorting out literature, and forming a scientific understanding of facts through literature research. This research through the knowledge network in order to "professional identity" in China "special education professional identity" "special education students' professional identity" for retrieval, collection, topics related to the literature, on the basis of the existing literature research, recognize and grasp the present situation of special education students' professional identity, find their own research direction and content, to provide the reference for subsequent research.

### 2.2.2 Questionnaire Survey

Questionnaire survey method, also called questionnaire method, is a survey method that surveyors use uniformly designed questionnaires to get information from respondents or collect opinions. The questionnaire "Current Status of Professional Identity of Undergraduates in Special Education" adopted in this study was compiled by Guan Chunlan, Wang Yan and others. A questionnaire survey was conducted among the students of special education in three colleges and universities in Guangxi.

## 2.3. Research Tools

The questionnaire "Status quo of Professional Identity of Undergraduates in Special Education" was compiled for Guan Chunlan, Wang Yan and others. The questionnaire included five dimensions: 1. Value and development identification; 2. Emotional identification; 3. Professional identity; 4. Teaching identity; 5. Invest professionally. This questionnaire adopts five-point reverse scoring method to score, namely, "1 indicates full agreement;2.3 indicates uncertainty.4.5 means totally disagree ", the lower the score of the questionnaire, the higher the degree of professional identity. In this study, a total of 360 questionnaires were issued to the students of special education in Guangxi Normal University, Nanning Normal University and Guangxi Preschool Normal College. Due to the large gap in the total number of special education students in the three colleges, questionnaires could only be distributed as many as possible. A total of 332 questionnaires were collected, including 62 from Guangxi Normal University, 125 from Nanning Normal University and 135 from Guangxi Preschool Teachers College.SPSS20.0 software was used to input and sort out the collected data, and the reliability and validity of the questionnaire were analyzed. Independent sample T test and one-way analysis of variance were performed on the data, and the results were analyzed. The recovery rate was 91.94%, and there were 322 valid questionnaires, with an effective rate of 97.28%, excluding incomplete and inaccurate questionnaires. It can be seen from Table 2 that the reliability of each dimension of the questionnaire ranges from 0.631 to 0.881, and the reliability of the overall questionnaire is 0.942, indicating that the questionnaire is highly reliable.

Table 2: Reliability and validity analysis of questionnaires.

| The dimension | Cronbach's Alpha | A number of |
|---|---|---|
| Value and development identification | 0.792 | 10 |
| Affective commitment | 0.676 | 10 |
| Professional identity | 0.631 | 7 |
| Teaching identity | 0.881 | 8 |
| Professional investment | 0.877 | 10 |
| Professional identity | 0.942 | 45 |

## 3. Research Results, Discussion and Analysis

### 3.1. Research Results

### 3.1.1 Status Quo of Professional Identity of Special Education Normal University Students

In this study, the mean values of all subjects in the five dimensions of value and developmental identity, emotional identity, professional identity, teaching identity and professional involvement were 2.25, 2.51, 2.20, 2.75 and 2.48 respectively, and the total mean values of dimensions were 2.44, scoring between 2-3. The 5-point reverse scoring method is adopted in this table, and the median is 3. Therefore, the results of this study show that the overall level of professional identity of the subjects is above the average level, and the teaching identity is the highest. From low to high, professional identity, emotional identity, professional engagement, value and development identity are in order (in Table 3).

Table 3: General situation of professional identity of Special education normal University students in Guangxi (n=322).

| The dimension | M ± SD |
|---|---|
| Value and development identification | 2.25 ± 0.49 |
| Affective commitment | 2.51 ± 0.47 |
| Teaching identity | 2.20 ± 0.63 |
| Professional identity | 2.75 ± 0.54 |
| Professional investment | 2.48 ± 0.63 |
| Professional identity | 2.44 ± 0.48 |

### 3.1.2 An Analysis of Differences in Professional Identity between Gender, only Child and Place of Origin

As shown in Table 4, 5 and 6, through independent sample T test, gender, only child and place of origin have no significant differences in professional identity. Gender (P =0.056 > 0.05, t=1.92); Whether the only child (P =0.95 > 0.05, t=-0.06); All p values were greater than 0.05 in the student origin (P =1.83 > 0.05, T =1.33). Therefore, different there was no significant difference in professional identity between gender, only child and place of origin.

Table 4: Analysis of gender differences in professional identity (n=322).

| | male<br>M± SD | female<br>M±SD | t | p |
|---|---|---|---|---|
| Value and development identification | 2.40 ± 0.54 | 2.24 ± 0.29 | 1.414 | 0.158 |
| Affective commitment | 2.60 ± 0.35 | 2.50 ± 0.47 | 0.867 | 0.386 |
| Teaching identity | 2.63 ± 1.07 | 2.17 ± 0.59 | 1.794 | 0.090 |
| Professional identity | 2.88 ± 0.47 | 2.74 ± 0.54 | 1.040 | 0.299 |

| | | | | |
|---|---|---|---|---|
| Professional investment | 2.70 ± 0.78 | 2.46 ± 0.62 | 1.543 | 0.124 |
| Professional identity | 2.64 ± 0.53 | 2.42 ± 0.47 | 1.915 | 0.056 |

Table 5: Analysis of differences in professional identity of only child or not (n=322).

| | is | no | | |
|---|---|---|---|---|
| | M ± SD | M ± SD | t | p |
| Value and development identification | 2.24 ± 0.43 | 2.25 ± 0.50 | 0.078 | 0.938 |
| Affective commitment | 2.46 ± 0.46 | 2.52 ± 0.47 | 0.659 | 0.510 |
| Teaching identity | 2.21 ± 0.50 | 2.20 ± 0.65 | 0.112 | 0.911 |
| Professional identity | 2.79 ± 0.52 | 2.75 ± 0.55 | 0.529 | 0.597 |
| Professional investment | 2.45 ± 0.61 | 2.48 ± 0.64 | 0.255 | 0.799 |
| Professional identity | 2.43 ± 0.39 | 2.44 ± 0.49 | 0.063 | 0.950 |

Table 6: Analysis of differences in professional identity of students in origin places (n=322).

| | Cities and towns | rural | | |
|---|---|---|---|---|
| | M ± SD | M ± SD | t | p |
| Value and development identification | 2.27 ± 0.49 | 2.24 ± 0.49 | 0.578 | 0.564 |
| Affective commitment | 2.57 ± 0.48 | 2.49 ± 0.46 | 1.263 | 0.207 |
| Teaching identity | 2.28 ± 0.74 | 2.17 ± 0.59 | 1.267 | 0.206 |
| Professional identity | 2.86 ± 0.52 | 2.72 ± 0.55 | 1.944 | 0.053 |
| Professional investment | 2.52 ± 0.67 | 2.46 ± 0.62 | 0701 | 0.484 |
| Professional identity | 2.49 ± 0.48 | 2.42 ± 0.47 | 1.334 | 0.183 |

### 3.1.3 Analysis of Differences in School's Professional Identity

As shown in Table 7, through one-way an OVA, specific to each sub-dimension of professional identity, it can be seen that professional identity is more important than professional identity.

There are significant differences in different schools. Professional identity is the lowest in the average value of all sub-dimensions of special education normal university students in the three institutions, followed by Guangxi Normal University professional identity score from high to low is value and development identity, emotional identity, teaching identity, professional involvement. The average professional identity of Nanning Normal University and Guangxi Preschool Teachers college from high to low is teaching identity, value and development identity, professional involvement, emotional identity.

Table 7: Analysis of differences in professional identity among schools (n=322).

| | Guangxi Normal University | Nanning Normal University | Guangxi Preschool Normal high school Junior college | | | |
|---|---|---|---|---|---|---|
| | M ± SD | M ± SD | M ± SD | F | p | LSD |
| Value and Development identity | 2.46 ± 0.47 | 2.33 ± 0.46 | 2.07 ± 0.47 | 18.842 *** | 0.000 | 1>3, 2>3 |
| Affective commitment | 2.69 ± 0.29 | 2.64 ± 0.41 | 2.30 ± 0.50 | 27.794 *** | 0.000 | 1>3, 2>3 |
| Teaching identity | 2.75 ± 0.72 | 2.27 ± 0.54 | 1.88 ± 0.45 | 55.504 *** | 0.000 | 1>2,1>3,2>3 |
| Professional identity | 3.03 ± 0.37 | 2.90 ± 0.40 | 2.52 ± 0.62 | 26.912*** | 0.000 | 1>2,1>3,2>3 |
| Professional investment | 2.93 ± 0.59 | 2.58 ± 0.57 | 2.17 ± 0.55 | 41.742 *** | 0.000 | 1>2,1>3,2>3 |

Note: *P<0.05, **P<0.01, ***P<0.001
1= Guangxi Normal University;
2= Nanning Normal University;
3=Guangxi Preschool Normal high school Junior college.

In terms of value, developmental identity and emotional identity, Guangxi Normal University scored higher than Nanning Normal University, and Guangxi Normal University scored higher than Guangxi Preschool Normal College. In the three dimensions of teaching identity, professional identity and professional involvement, Guangxi Normal University scored higher than Nanning Normal University, Guangxi Normal University scored higher than Guangxi Preschool Teachers College, Nanning Normal University scored higher than Guangxi Preschool Teachers College. Therefore, the professional identity level of the special education normal university students at different levels in Guangxi is higher than that of the second college and junior college, and the second college is higher than that of the college.

### 3.1.4 Analysis of Grade Differences in Professional Identity

As shown in Table 8 and Table 9, Guangxi Normal University and Nanning Normal University, namely undergraduate colleges, have 4 grades, and Guangxi Preschool Teachers' College, namely junior colleges, have 3 grades, so undergraduate and junior colleges are counted separately.

According to one-way an OVA, there are significant differences in value and development identity (P =0.035 < 0.05), emotional identity (P =0.024 < 0.05) and professional engagement (P =0.010 < 0.05) among the normal university students of special education. There were significant differences in emotional identity (P =0.002 < 0.05), professional identity (P =0.000 < 0.05) and professional involvement (P =0.005 < 0.05) among special education normal college students.

The average score of undergraduate institutions is as follows: Professional identity < professional involvement < emotional identity < value and development identity < teaching identity; In grade two, the score of each dimension from low to high is professional identity < professional involvement < emotional identity < teaching identity < value and development identity; In the third grade, the score of each dimension from low to high is professional identity < professional involvement and emotional identity < teaching identity < value and development identity; The score of each dimension in the fourth grade from low to high is professional identity < emotional identity < professional involvement < teaching identity < value and development identity.

The average score of junior colleges is as follows: professional identity < emotional identity < professional involvement < value and development identity < teaching identity; In grade three, the score of each dimension from low to high is professional identity < emotional identity < value and development identity < professional involvement < teaching identity.

Table 8: Analysis of differences in the dimension of professional identity among different grades in undergraduate institutions (n=187).

| | Professional identity M±SD | first grade M±SD | second grade M±SD | Three grade M±SD | fourth grade M±SD | F | p | LSD |
|---|---|---|---|---|---|---|---|---|
| Value and development identity | 2.38±0.47 | 2.44±0.43 | 2.20±0.48 | 2.38±0.50 | 2.50±0.44 | 2.924* | 0.035 | 1>2,4>2 |
| Emotional identity | 2.66±0.37 | 2.69±0.32 | 2.52±0.39 | 2.66±0.38 | 2.76±0.39 | 3.208* | 0.024 | 1>2,4>2 |
| Teaching identity | 2.43±0.65 | 2.39±0.48 | 2.32±0.76 | 2.52±0.79 | 2.51±0.57 | 0.988 | 0.400 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| career identity | 2.92±0.40 | 3.00±0.38 | 2.82±0.39 | 2.85±0.37 | 2.95±0.44 | 2.367 | 0.072 |
| Professional investment | 2.70±0.60 | 2.89±0.55 | 2.59±0.58 | 2.66±0.70 | 2.53±0.51 | 3.926** | 0.010 1>2,1>3,1>4 |
| Professional identity | 2.62±0.40 | 2.68±0.34 | 2.49±0.44 | 2.61±0.49 | 2.64±0.33 | 2.127 | 0.098 |

Note: *P<0.05, **P<0.01, ***P<0.00

1 is the first grade;

2 is the second grade;

3 is the third grade;

4 is the fourth grade.

Table 9: Analysis of differences in professional identity dimensions of different grades in colleges and universities (N =135).

| | Professional identity M±SD | first grade M±SD | second grade M±SD | fourth grade M±SD | F | p | LSD |
|---|---|---|---|---|---|---|---|
| Value and development identity | 2.07±0.47 | 2.07±0.41 | 2.10±0.40 | 2.03±0.54 | 0.236 | 0.790 | |
| Emotional identity | 2.30±0.50 | 2.46±0.31 | 2.44±0.36 | 2.14±0.58 | 6.710** | 0.002 | 3<1,3<2 |
| Teaching identity | 1.88±0.45 | 1.95±0.39 | 1.85±0.40 | 1.89±0.51 | 0.272 | 0.762 | |
| career identity | 2.52±0.62 | 2.91±0.28 | 2.69±0.46 | 2.29±0.71 | 10.342*** | 0.000 | 3<1,3<2 |
| Professional investment | 2.17±0.55 | 2.38±0.50 | 2.29±0.48 | 2.01±0.57 | 5.479** | 0.005 | 3<1,3<2 |
| Professional identity | 2.19±0.46 | 2.35±0.29 | 2.27±0.35 | 2.07±0.55 | 3.930* | 0.022 | 3<1,3<2 |

Note: *P<0.05, **P<0.01, ***P<0.00

1 is the first grade;

2 is the second grade;

3 is the third grade;

According to the post-mortem, the scores of value and development identity, emotional identity and professional engagement in undergraduate schools are higher in freshmen than in sophomores, and higher in seniors than sophomores. The score of professional identity in junior college is higher than that in grade one and higher than that in grade two. In the three dimensions of emotional identity, professional identity and professional engagement grade 1 also scored higher than grade 3, and grade 2 scored higher than grade 3.

### 3.1.5 Analysis of Differences in Professional Identity of Student Cadres

As shown in Table 10, there are some significant differences in professional identity between students who are student leaders and those who are not. According to the independent sample T test, 173 students are student leaders, while 148 students are not. Those who are not student leaders score higher than those who are student leaders in all dimensions. Professional identity < emotional identity < professional involvement < value and development identity < teaching identity. There were significant differences in professional identity between student cadres and non-student cadres (P =0.048 < 0.05, T =1.99), value and development identity (P =0.25 > 0.05, T =1.16), emotional identity (P =0.13 > 0.05, T =1.50), teaching identity (P =0.19 > 0.05, T =1.32) and professional identity (P =0.12 > 0.05, T =1.57) had no significant difference, but only professional involvement (P =0.006<0.05, T =2.79) had significant difference.

Table 10: Analysis of differences in professional identity of student cadres (n=322).

| | Yes(n = 173) M ± SD | No (n = 148) M ± SD | t | p |
|---|---|---|---|---|
| Value and development identification | 2.22 ± 0.53 | 2.28 ± 0.45 | 1.162 | 0.246 |
| Affective commitment | 2.47 ± 0.49 | 2.55 ± 0.44 | 1.503 | 0.134 |
| Teaching identity | 2.15 ± 0.62 | 2.25 ± 0.65 | 1.322 | 0.187 |
| Professional identity | 2.71 ± 0.56 | 2.80 ± 0.52 | 1.574 | 0.116 |
| Professional investment | 2.39 ± 0.64 | 2.58 ± 0.61 | 2.785** | 0.006 |
| Professional identity | 2.39 ± 0.50 | 2.49 ± 0.45 | 1.988* | 0.048 |

Note: *P<0.05, **P<0.01

### 3.1.6 Analysis of Differences in Family Economic Status in Professional Identity

As shown in Table 11, in terms of professional identity, there are significant differences in family economic status. According to one-way an OVA, the average of family economic status from very good to good and general in each dimension is professional identity < emotional identity < professional investment < value and development identity < teaching identity. The average value of those with poor family economic status from low to high is professional identity < professional investment < emotional identity < value and development identity < teaching identity. In addition to professional identity (P =0.093 > 0.05), there were significant differences in value and development identity (P =0.002 < 0.05), emotional identity (P =0.017 < 0.05), teaching identity (P =0.002 < 0.05), professional involvement (P =0.001 < 0.05).

Table 11: Analysis of the differences in the professional identity of the family economic status (n=322)

| | The total number of M±SD | 1.Very good M±SD | 2.better M±SD | 3.The general M±SD | 4.The poor M±SD | F | p | LSD |
|---|---|---|---|---|---|---|---|---|
| Value and development identity | 2.25±0.49 | 1.87±0.83 | 2.01±0.50 | 2.25±0.47 | 2.44±0.51 | 5.167** | 0.002 | 1<4,2<4 3<4,2<3 |
| Emotional identity | 2.51±0.47 | 2.47±0.92 | 2.24±0.38 | 2.52±0.46 | 2.59±0.39 | 3.448* | 0.017 | 2<3,2<4 |
| Teaching identity | 2.20±0.63 | 1.52±0.51 | 1.92±0.57 | 2.22±0.61 | 2.35±0.72 | 5.024** | 0.002 | 1<3,1<4 2<3,2<4 |
| career identity | 2.75±0.54 | 2.74±0.61 | 2.55±0.57 | 2.75±0.55 | 2.89±0.44 | 2.154 | 0.093 | |
| Professional investment | 2.48±0.63 | 2.33±0.95 | 2.06±0.57 | 2.50±0.62 | 2.66±0.60 | 5.288** | 0.001 | 2<3,2<4 |
| Professional identity | 2.43±0.48 | 2.19±0.70 | 2.16±0.43 | 2.45±0.47 | 2.59±0.44 | 5.116** | 0.002 | 2<3,2<4 |

Note: *P<0.05, **P<0.01, ***P<0.001;
1 is very good; 2 is better;3 is general;4 means poor.

According to the post-mortem test, the score of family economic status in the total dimension of professional identity is better than average, better than poor; In the dimension of value and development identity, the score is very good lower than poor, good lower than poor, general lower than poor, good lower than average; In the dimension of emotional identity, the score is better than

average, better than poor; In the dimension of teaching identity, the score is very good lower than average, very good lower than poor, good lower than average, good lower than poor; The scores of professional engagement are better than average, better than poor.

### 3.1.7 Analysis on the Difference of Professional Voluntary in Professional Identity

As shown in Table 12, professional voluntary has significant differences in professional identity (P =0.000 < 0.05). According to one-way an OVA, there are significant differences in all dimensions, among which value and development identity (P =0.00 < 0.05); Emotional identity (P =0.001 < 0.05); Teaching identity (P =0.012 < 0.05); Professional identity (P =0.015 < 0.05); Professional input (P =0.001 < 0.05). The average value of professional voluntary is professional identity < emotional identity < professional involvement < value and development identity < teaching identity from lowest to highest. The average value of each dimension from low to high is professional identity < professional involvement < emotional identity < value and development identity < teaching identity.

Table 12: Difference analysis of professional voluntary in professional identity (n=322).

| | Professional identity | 1.Independent choice | 2.Suggestions from parents and others | 3.other reasons | | | |
|---|---|---|---|---|---|---|---|
| | M ± SD | M ± SD | M ± SD | M ±SD | F | p | LSD |
| Value and development identity | 2.25±0.49 | 2.14 ± 0.49 | 2.23 ± 0.46 | 2.40±0.47 | 10.450*** | 0.000 | 1 < 3, 2 < 3 |
| Emotional identity | 2.50±0.47 | 2.41 ± 0.50 | 2.52 ± 0.37 | 2.63±0.42 | 7.661** | 0.001 | 1 < 3 |
| Teaching identity | 2.20±0.63 | 2.11 ± 0.63 | 2.16 ±0.57 | 2.34±0.64 | 4.452* | 0.012 | 1 < 3 |
| career identity | 2.75±0.54 | 2.66 ± 0.58 | 2.77 ± 0.46 | 2.86±0.50 | 4.282* | 0.015 | 1 < 3 |
| Professional investment | 2.48±0.63 | 2.35± 0.63 | 2.48 ± 0.58 | 2.65±0.63 | 7.672** | 0.001 | 1 < 3 |
| Professional identity | 2.44±0.48 | 2.33±0.49 | 2.43 ± 0.41 | 2.57±0.45 | 8.925*** | 0.000 | 1 < 3 |

Note: *P<0.05, **P<0.01, ***P<0.001
1 stands for independent choice;
2 represents suggestions from parents and others;
3 is for other reasons.

According to the post-hoc test, the score of professional voluntary in the total dimension of professional identity is that independent choice is lower than other factors.   In the four dimensions of emotional identity, teaching identity, professional identity and professional involvement, the independent choice is lower than the others. In terms of value and development identity, the score of independent choice is lower than that of parents and others, while that of parents and others is lower than others the reason.

### 3.2.Discussion and Analysis

### 3.2.1 The Influence Factors of Gender, only Child and Place of Origin on Professional Identity

There is a large gap between men and women in the data samples, and a large gap in sample size may lead to insignificant differences. Among the 322 questionnaires, there were 18 male students, accounting for 5.6%, and 304 female students, accounting for 94.4%. There were 8 students from Guangxi Normal University, 6 students from Nanning Normal University, and 4 students from Guangxi Preschool Teachers College. The imbalance between male and female ratio is a common phenomenon in normal universities. Only a few male students are willing to choose to be a normal university student. Only children and the one-child, and from urban or rural, there were no significant differences on professional identity to explain whether the one-child and students for their professional identity almost no effect on the students, many students of normal colleges and universities in the future to choose is to choose the teaching teacher this profession, solid foundation of knowledge and skills are must have engaged in a professional, It is not limited by its own factors. Therefore, the level of professional identity is more influenced by other aspects.

### 3.2.2 The Influencing Factors of Differences in School Professional Identity

The three schools cover the first, second and junior college levels, of which one and two are undergraduate institutions. In terms of professional identity, first-tier colleges are higher than second-tier colleges and junior colleges, and second-tier colleges are higher than junior colleges. Specific to each dimension, it is found that there are significant differences between junior colleges and undergraduate colleges in each dimension (P =0.000 < 0.05). There are no significant differences in value and developmental identity, emotional identity and professional identity, but there are significant differences in teaching and learning identity and professional involvement. The author thinks that the special education students in colleges and universities have different training objectives and directions due to the different nature of colleges and universities. College students attach more importance to practical operation and application, while undergraduate students attach more importance to theoretical study. Compared with undergraduates, college students are less selective in their future employment choices. They differ from undergraduates in thinking about the importance, value, development prospect and employment prospect of their major, whether they are willing to engage in special education work in the future, and recognition of front-line teaching of special education. Therefore, the level of professional identity is significantly different from that of undergraduate normal education students and lower than that of undergraduate universities. In the study of Wei Lian and others, it is also found that college students have higher employment pressure than undergraduate students. The main reason for the pressure is that most of the recruitment threshold of employment institutions requires bachelor's degree or above, and college students may easily feel inferior for these reasons [19]. Two undergraduate course school in the school in teaching identity and professional into two dimensions have significant new differences, the author believes that the colleges and universities teachers strength is stronger in 2 colleges, scientific research conditions better than 2 colleges, a college student in professional learning more positive seriously, investment of time and energy of students more than 2 colleges, Therefore, there are significant differences between the two institutions in these two dimensions.

### 3.2.3 The Influencing Factors of Grade Difference in Professional Identity

On the data analysis of grade that undergraduate and college level are different grade in the professional identity is in grade one of the highest level of professional identity, the author thinks that, a special education has just begun to contact the professional grade students, for university life

is full of expectations, to professional learning is full of desire, at this time of the highest level of professional identity. After the first year, the level of professional identity of undergraduate and junior college students is significantly different. The higher the undergraduate students are, the higher their professional identity is. After four years of theoretical learning and more and more practical experience, undergraduate students have a better understanding of their major. But unlike college students, undergraduate students in practice is given priority to with practice, when the opportunity to personally speaking only three or four years of practice, the undergraduates in combining theory and the field of stage, want to use a more professional knowledge and skills used in practice, so the level of professional identity as the growth of the grade shows ascendant trend. However, colleges and universities value students to master more skills, and students have more practical experience in practice. Due to the particularity of the education objects, they have a low sense of accomplishment in practical operation, which may lead to some job burnout. Therefore, with the increase of grades, that is, they have more practical experience, and their professional identity level tends to decline.

### 3.2.4 The Influencing Factors of the Difference in Professional Identity of Student Cadres

According to the data, there is a significant difference only in the dimension of professional investment among students who have or have not been student leaders, but in each sub-dimension, the scores of students who are not student leaders are higher than those who are student leaders. I think, did not do student cadres will use more time to carry out professional learning, and as a student cadre as a student to divide the time to work, in learning is not like other students to do the same concentration. But at the same time, as a student cadre of students in both work and study is likely to do better, in the work and study to ask themselves to do the best, student cadres play a role of demonstration, not only in the work ability, but also reflected in the professional learning ability. In other professional activities or scientific research activities, the enthusiasm of student cadres can drive other students. However, it is also possible that on the contrary, student cadres may not be able to balance work and study, focusing on a certain aspect, or student cadres may be good at work and lag behind in professional learning. Therefore, there are significant differences between students who are student cadres and those who are not.

### 3.2.5 The Influencing Factors of the Difference of Family Economic Status in Professional Identity

Family economic conditions, on the whole, professional identity from the poor to the very good present a downward trend, the author believed that home court economy of poor students want to pass knowledge to change destiny, through the digital display shows family economic situation of poor students in various dimensions are higher than the rest of the family economic conditions, in addition to professional identity are the highest score, students from poorer families scored highest on professional commitment. Therefore, the poor economic situation of the family encourages the students to devote more energy to study and strive to become a special education teacher in the future. Therefore, they work harder on their professional study and have a high level of professional identity. However, students with better family economic status may not take the improvement of family economic status as the motivation for learning because they are under less economic pressure and do not have high salary expectations for their future careers.

### 3.2.6 The Influencing Factors of the Difference between Professional Voluntary and Professional Identity

In terms of professional voluntary choice, the level of professional identity for other reasons is the highest, followed by the advice of parents and others, and the lowest level of independent choice. The author believes that professional voluntary means that students who follow their parents' and other suggestions have a clear plan for their future career, and their parents or others may help them to guide their professional prospects or employment prospects. Therefore, students who follow their parents' and other suggestions are above average. Other students may not be very willing to study in this major at the beginning, but after a systematic study, they have a new understanding of special education, and their level of professional identity changes from low to high. Self-selected students may feel frustrated because their expectations for special education are not as high as expected, and thus have the lowest level of professional recognition.

## 4. Conclusions and Suggestions

### 4.1.Basic Conclusions of the Study

1. The professional identity level of Guangxi normal education students is above the average level, and the teaching identity is the highest, which is emotional identity > professional investment > value and development identity > professional identity;

2. There are no significant differences in professional identity among different genders, only children and places of origin;

3. Guangxi Normal University has the highest level of professional identity of special education students, followed by Nanning Normal University, and Guangxi Preschool Teachers College has the lowest level of professional identity of special education students.

4. There are significant differences in professional identity among freshmen, sophomores, juniors and seniors. In general, the degree of professional identity of freshmen is the highest, followed by senior > junior > sophomore. The level of professional identity in junior colleges declined from grade one to grade three.

5. The significant difference of whether to be a student leader is mainly reflected in the dimension of professional investment;

6. Those with poor family economic status have the highest level of professional identity, which is higher than that of good, very good and average;

7. In terms of professional voluntary, the level of professional identity for other reasons is the highest, followed by following the advice of parents and others, and the lowest level of professional identity is independent choice.

### 4.2.Suggestions

#### 4.2.1 Improve Training Programs to Promote Students' All-round Development

According to the research results, it is found that different colleges and universities have different emphases on the professional training of students. Undergraduate students pay more attention to theory, while junior college students pay more attention to skills. In practical learning, undergraduate students prefer to learn more skills courses, so as to better apply the knowledge from textbooks into practical operation. In terms of course arrangement, it can be arranged before the practical learning of nearby students. In the research of Sun Yumei et al., there are some shortcomings in the special education course arrangement of colleges and universities, mainly in the

arrangement of practical classes with a single form [20]. Moreover, most of the educational practice in special education in China is mainly arranged in the first semester of the senior year, with many internship tasks and certain difficulties. As students are approaching graduation, some graduation related matters are tedious, leading to some students' lack of skills. Therefore, it is suggested that the educational practice should be carried out in advance or in different time periods. The colleges and universities learn from each other, establish exchanges, for better training excellent special education teachers to give advice. In addition, Wang Bo et al. believe that special education students' special education feelings should be cultivated. He believes that special education feelings are the strong internal motivation and spiritual support for special education students to engage in the cause of special education, and cultivation of special education feelings is conducive to improving the professional identity of special education students [21]. Zhang Jin believes that professional humanistic quality plays an important role in professional construction [22]. Make use of Guangxi special Education normal university students have the advantage of having the highest level of professional identity when they enter the first grade. Vocational humanistic literacy courses can be arranged in the first grade to lay a good professional foundation for students.

### 4.2.2 According to the Characteristics of Students, Targeted Teaching

According to the grade characteristics of students, we can set some interesting courses by taking advantage of the high level of professional identity of first-year students. For example, if students want to learn more practical courses, colleges and universities can set some elective courses for students to choose to learn. In terms of teaching methods, some special education teaching methods can be used in the classroom teaching of special education normal students, so that students can experience in learning. Special education laboratories can be used to carry out situational teaching for students. But at the same time to pay attention to the difficulty level of each course, difficulty, dozen good student psychological foundation, let the students feel the fun, also want to know what special education study hard is good, because the future of students with special needs is the object of education, teacher to student's professional build neither too idealistic, also cannot let the student be reality scare, Teachers need to master the intensity.

### 4.2.3 Step up Publicity to Make Special Education Visible

We should actively publicize special education so that more people can not only learn about special education as a major, but also know what special education can do and what kind of development it will have in the future. Special education is a new major. In fact, there are still many people who do not know what special education is. Their understanding of special education is so one-sided that they have a fear of it. Qian zhang and others in the ordinary undergraduate students as investigation object, and special education attitude, investigation and study of the very few ordinary students understanding of special education, they know special-education ways mainly have passed pass, or other electronic media and print media, and special education of normal students said to have a certain interest [23]. Colleges and universities can take advantage of the advantages of college students, hold more activities in the field of special education in school, create situations to encourage other normal students to actively participate in, and intuitively understand special education through personal experience. The publicity of teachers in front-line schools is also important. Teachers can answer questions for students when they fill in the application form, and front-line schools can publicize before students fill in the application form, so that more students can know about special education and what special education is. Parents should encourage students to choose their own wishes and respect their children's wishes. Colleges and universities should further publicize the new students when they enter school, improve their interest in learning for

students who choose their own majors, make students who follow the advice of their parents and others have a clearer understanding of special education, strengthen psychological comfort for the transferred students, and help them look at special education correctly.

### 4.2.4 Strengthen Students' Career Planning and Guidance

Students may have lost in the process of learning stage, Xu Jiaxin in related research is put forward in the colleges and universities to teach the students should set the course of career planning and employment guidance, let the students in the process of learning the knowledge and skills outside can be more aware of their own professional, in addition, Suggestions on a regular basis to open expert lectures, BBS, Let students know the latest development information of special education [24]. Han Yuting et al. also believe that scholars related to special education are regularly invited to the school to give lectures and organize some academic research activities [25]. In terms of students' learning practice, some students do not know what kind of school they should go to before the internship. Senior students do not have a clear goal when looking for a job. They do not know what kind of special teaching job they are suitable for, and where they should go is more suitable for them. We should guide students' career planning and help them to know themselves.

## 5. Deficiencies of Research

### 5.1. Deficiencies of Research Methods

This study has a certain limitation, this study is through the way of questionnaire to Guangxi special education students' professional identity status quo investigation, for some of the differences in data is difficult to explain, the scope of the questionnaire is too small, and to find a completely suitable for special education undergraduate and college students' questionnaires, there is only one kind of research method, the questionnaire survey.

### 5.2. Insufficient Research Samples

The research samples were concentrated in Guangxi, and both paper and electronic questionnaires were issued at the same time. There were too many invalid questionnaires in paper questionnaires, which was not conducive to the complete collection of data. Besides, due to the large gap in the number of special education normal university students in different colleges and universities, the data results may have some deviation.

## References

[1] Hu Yuting, Lei Jingguo. A Survey on the Status quo of Specialty Identity of Special Education Undergraduates in Local Universities -- A Case study of Guizhou Normal University. Journal of changchun university, 2016, 26(11):120-124.

[2] Huang Zhong River. Investigation on the status quo of professional identity of teachers in guangxi special education schools. Journal of suihua university, 2019, 39(10):95-99.

[3] Hu Jinping, Wang Xiaoyan. A Study on professional identity of Special Education Students in Colleges and universities: A Case study of Jinan University. Journal of suihua university, 2018, 38(04):145-149.

[4] Xu Shuai, ZHAO Bin. Research on the Status quo of Professional Identity of Special Education Students in Bijie College. Journal of bijie university, 2013, 31(02):83-87.

[5] Wu Junhua, Huang Luxu. Investigation and Research on the Status quo of Professional Identity of Special Education College Students in Guizhou Province. Journal of Tianjin Sino-German Vocational and Technical College, 2016(06):85-89.

[6] Yang Qing. A Survey on Professional Identity of Normal University Students -- A Case Study of Two Normal Universities in Beijing. University (research)

[7] Lei Li. *Research on the influence of Professional identity on Employment choice of Fresh Graduates of Special Education Major. Modern Special State Education*, 2019(08):59-67.

[8] Guan Chunlan, WANG Yan, Zhang Limin. *A Survey of undergraduates' professional identity in Special Education: A Case study of two national key Normal Universities. Chinese Journal of Special Education*, 2011(04):22-29.

[9] Xiu Yunhui. *A Survey of undergraduates' professional identity in Special Education: A Case study of Guizhou Institute of Engineering Application Technology. Journal of guizhou institute of engineering application technology*, 2019, 37(05):120-125.

[10] Liu Si, Wang Ping. *A Study on professional identity of Special Education Students: A Case study of students in a Normal University. Journal of suihua university*, 2017, 37(10):157-160.

[11] Li hong. *The status quo and Education Countermeasures of Professional identity of Special Education Students in Leshan Normal University. Education review*, 2019, 8(24):127-129.

[12] Chen Li, Yang Qiong. *The Relationship between professional identity and learning burnout and Learning efficacy among Special Education Students. Chinese Journal of Special Education*, 2018(01):39-45.

[13] Sun Yumei, Lei Jianghua. *Research on the Psychological process of professional identity of freshmen in special Education. Education Research and Practice*, 2016(02):52-56.

[14] Feng Wei, MAO Zhaying, Li Dan. *The Relationship between Altruistic Motivation, Professional Identity and Subjective Well-being of Special Education Students. Journal of teacher education*, 2017, 4(02):35-42.

[15] CAI Chenmei. *Journal of fujian university of education*, 2016, 17(04):47-51+128.

[16] Liang Cailing. *A Survey of Professional Identity of Normal University Freshmen -- Taking a university in Guangxi as an example. Contemporary Interlactation*, 2018(16):122-123.

[17] Wang Baozhu, PENG Wenbo, SHEN Renhong. *The influence of personality on professional identity of special education students. Journal of teacher education*, 2018, 5(04):29-35.

[18] Lei Li. *Research on the influence of Professional identity on employment choice of Fresh Graduates of Special Education Major. Modern Special State Education*, 2019(08):59-67.

[19] Wei Lian, Lei Guanghui. *A Comparative study on Employment Stressors and Coping Styles of Undergraduates and Vocational College Students. Journal of jianghan university (social science edition)*, 2012, 29(02):95-99.

[20] Sun Yumei, Lei Jianghua. *Modern Special Education*, 2018(08):3-7.

[21] Wang Bo, JU Keliang. *Special Education Feelings of Special Education Students in Normal Education: Value Implication, Characteristics and Cultivation Path. Chinese Journal of Special Education*, 2020(11):49-54.

[22] nichle. *Research on the Teaching strategy to improve the professional identity of special Education students: Taking the teaching of professional humanistic quality as an example. Contemporary Vocational Education*, 2019(12):58-59.

[23] Zhang Qian, Li Huan. *A Survey of Undergraduates' Attitudes to special Education -- A Case study of Southwest University. Bijie College in 2014*, 32 (7): 72-77.

[24] Xu Jiaxin. *A Survey on the status quo of professional identity of Special Education normal College Students -- A Case study of three Normal colleges in Jiangxi Province. Henan Education (Preschool Education)*, 2020(06):27-31.

[25] Han Yuting, Wang Bo, Wang Tingzhao. *Research on the relationship between professional identity and career decision-making difficulties of special Education normal Students. Modern Special Education*, 2015(10):62-68.