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# Status Quo and Influencing Factors of Freshmen's Professional Commitment: Local Universities

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Abstract. Professional commitment is an important index to measure college students' recognition of their major. This study aimed to analyze the professional attitude and study preparation of freshmen with regard to the current situation of professional commitment to promote their adaptation to college study and career planning. Especially in local colleges and universities, freshmen show more doubts, confusion, anxiety, and pessimism about the major they will learn. The findings of this study revealed that the current situation of professional commitment of freshmen in local colleges was not optimistic, and the major type, professional intention, professional vision, and professional effectiveness greatly impacted the level of professional commitment of freshmen. Therefore, local colleges and universities should strengthen the professional education of freshmen at the psychological level and help them establish a good professional commitment as soon as possible.

Keywords. Freshmen, professional commitment, psychological factors

## 1. Concept of professional commitment

Professional commitment of college students refers to their positive attitude and behavior in identifying themselves with their major and being willing to make corresponding efforts [1]. Specifically, it refers to a series of positive learning psychology characteristics of college students such as cognitive acceptance and recognition of their major, their emotional likes and hobbies, and their willingness to make great personal efforts and display good behaviors [2]. Freshmen's professional commitment is vital in predicting their future learning status. First, the intensity of professional commitment can predict the level of learning burnout [3]. Second, the strength of professional commitment can also predict the level of learning adaptation [4]. In addition, college students' professional commitment also has an essential

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predictive effect on factors such as learning responsibility, learning engagement, and academic emotion [5].

At present, the overall level of college students' professional commitment is not ideal and shows a downward trend, especially in local ordinary undergraduate colleges and universities. Being negative and confused in learning is common for college students because they disagree with their major and are unwilling to make effort. Exploring the influencing factors of freshmen's professional commitment and making more reasonable academic planning on this basis may be of great significance.

#### 2. Research objects and tools

## 2.1 Research object

This study included the freshmen of 2020 in a local undergraduate university as the research object. The questionnaire survey method was adopted for this study. A total of 350 questionnaires were randomly distributed, and 316 valid questionnaires were recovered, with an effective response rate of 90.29%.

#### 2.2 Research tool

The Scale of College Students' Professional Commitment designed by Lian Rong et al. [1], which exhibited good reliability and validity, was widely used in this study. The Cronbach  $\alpha$  coefficient of this scale was 0.927, and the half-point reliability was 0.831. This scale comprised 4 dimensions and 27 items, and the  $\alpha$  coefficients of each dimension were 0.814, 0.893, 0.797, and 0.871, respectively [1].

Projects were scored on a 5-point scale, from "completely inconsistent" to "completely consistent". The four dimensions were emotional commitment, ideal commitment, normative commitment, and continued commitment. Emotional commitment was defined as the feeling toward the major, indicating the emotional involvement degree of sticking to the choice of major. Ideal commitment was defined as the recognition that professionals could promote the realization of their own ideals. Normative commitment was defined as their responsibility and obligation to the major, indicating the degree of correlation between adhering to the choice of major and self-requirements. Continued commitment was defined as the ability to adhere to the degree of correlation between the choice of major and economic factors such as employment and occupational benefits [1].

#### 3 Research result

#### 3.1 Influence of demographic variables on professional commitment

In this study, three demographic variables were selected for analysis: gender, major type, and student origin background (Table 1). Among these, the major types included four fields: liberal arts, science and technology, medicine, and art. The student origin background mainly represented the main growth background and family environment

of college students, which was further divided into four types: rural, township, county, and above county.

Table 1. Mean and standard deviation of different demographic variables in each dimension and the total score of professional commitment

Item		Number	Emotional commitment	Ideal commitment	Normative commitment	Continued commitment	$Total \\ commitment \\ M \pm SD$	
		of people	$M \pm SD$	$M \pm SD$	$M \pm SD$	$M \pm SD$		
Sex	Male	113	$3.62 \pm 0.55$	$3.44\pm0.60$	$4.10 \pm 0.65$	$3.49 \pm 0.56$	$3.63 \pm 0.49$	
	Female	202	$3.69 \pm 0.60$	$3.50\pm0.63$	$4.11\pm0.55$	$3.57 \pm 0.59$	$3.69 \pm 0.50$	
Major type	Liberal arts	92	$3.57\pm0.62$	$3.52 \pm 0.62$	$4.08 \pm 0.57$	$3.57 \pm 0.63$	$3.65\pm0.51$	
	Science and engineering	102	$3.53\pm0.55$	$3.32\pm0.61$	$4.04\pm0.64$	$3.41\pm0.54$	$3.54 \pm 0.48$	
	Medical science	64	$3.78\pm0.57$	$3.55\pm0.67$	$4.25\pm0.54$	$3.70\pm0.55$	$3.80 \pm 0.50$	
	Art and sports	57	$3.91 \pm 0.51$	$3.58 \pm 0.56$	$4.10\pm0.56$	$3.54 \pm 0.56$	$3.78 \pm 0.44$	
Student background	Village	175	$3.63 \pm 0.60$	$3.43 \pm 0.66$	$4.12\pm0.58$	$3.51\pm0.58$	$3.64 \pm 0.51$	
	Towns	36	$3.81 \pm 0.49$	$3.54 \pm 0.49$	$4.01\pm0.76$	$3.59 \pm 0.52$	$3.72\pm0.42$	
	County	57	$3.61\pm0.60$	$3.48 \pm 0.59$	$4.06\pm0.51$	$3.58 \pm 0.64$	$3.65\pm0.51$	
	City	45	$3.73\pm0.59$	$3.58 \pm 0.59$	$4.16\pm0.56$	$3.57\pm0.60$	$3.74 \pm 0.49$	

Note:  ${}^*P < 0.05, {}^{**}P < 0.01.$ 

In this study, independent-samples t-test was used to analyze sex-related differences. The results showed no significant differences between male and female students in all dimensions and the total scores of professional commitment (Table 2). Further, one-way analysis of variance was used to test the difference in the major type and the student background. The results showed no significant differences in the dimensions and total scores of professional commitment among different student backgrounds. Significant differences in the partial dimensions and total scores of professional commitment were noted among different major types (Table 2). Specifically, significant differences were found in total commitment (medicine > art and sports > liberal arts > science and technology), emotional commitment (art and sports > medicine > liberal arts > science and technology), and ideal commitment (art and sports > medicine > liberal arts > science and technology). A significant difference was observed in continuing commitment (medicine > liberal arts > arts and sports > science and technology). Therefore, sex and student background had little influence on freshmen's professional commitment, while the major type had a great influence on the freshmen's professional commitment. Among these, medical students had the highest level of professional commitment, followed by art and sports students.

Table 2. Difference test of different demographic variables in each dimension and the total score of professional commitment

Source of difference	Emotional commitment		Ideal commitment		Normative commitment		Continued commitment		Total commitment	
	df	t/F	Df	t/F	df	t/F	Df	t/F	df	t/F
Sex	313	-0.888	313	-0.677	313	-0.195	313	-1.227	313	-0.933
Major type	3	7.189***	3	$3.376^{*}$	3	1.802	3	$3.526^{*}$	3	4.644**
Student background	3	1.310	3	0.793	3	0.538	3	0.395	3	0.621

Note:  ${}^*P < 0.05, {}^{**}P < 0.01.$ 

#### 3.2 Influence of psychological factors on professional commitment

Three psychological factors were selected for analysis in this study: professional intention, professional vision, and professional effectiveness (Table 3). Professional intention, which mainly refers to the willingness to choose the major when filling out the college entrance examination, is of three kinds: independent choice, others' willingness, and obedience to adjustment. Professional vision, which mainly refers to the evaluation of the development situation of the major, is divided into three types: popular expectations, general expectations, and unpopular expectations. Professional effectiveness, which mainly refers to the subjective evaluation of the interviewees' professional performance level, is also divided into three types: self-consciousness excellent, self-consciousness average, and self-consciousness poor.

**Table 3.** Average and standard deviation of different psychological factors in each dimension and the total score of professional commitment

Item		Number	Emotional commitment	Ideal commitment	Normative commitment	Continued commitment	Total commitment	
		of people	$M\pm SD$	$M\pm SD$	$M \pm SD \\$	$M\pm SD$	$M\pm SD$	
Professional intention	Independent choice	257	$3.75 \pm 0.55$	$3.57 \pm 0.56$	$4.13 \pm 0.56$	$3.63 \pm 0.54$	$3.75 \pm 0.45$	
	Others' willingness	29	$3.17 \pm 0.52$	$2.99 \pm 0.62$	$3.88 \pm 0.76$	$3.24\pm0.61$	$3.27\pm0.50$	
	Obedience	27	$3.35\pm0.64$	$3.12\pm0.78$	$4.09 \pm 0.63$	$2.98 \pm 0.59$	$3.35\pm0.57$	
Professional vision	Popular expectation	168	$3.77\pm0.54$	$3.64\pm0.55$	$4.20\pm0.54$	$3.70\pm0.52$	$3.80\pm0.44$	
	General expectation	132	$3.57\pm0.59$	$3.34\pm0.56$	$3.99\pm0.61$	$3.40\pm0.56$	$3.55\pm0.47$	
	Unpopular expectation	13	$3.16\pm0.81$	$2.64\pm1.05$	$4.02\pm0.81$	$2.83\pm0.66$	$3.11 \pm 0.77$	
Professional effectiveness	Self-conscious excellent	32	$4.04\pm0.49$	$3.91\pm0.60$	$4.32\pm0.55$	$3.67\pm0.60$	$3.98\pm0.49$	
	Self-conscious average	249	$3.68\pm0.55$	$3.47\pm0.58$	$4.07\pm0.60$	$3.54\pm0.58$	$3.67\pm0.47$	
	Self-conscious poor	30	$3.17 \pm 0.66$	$3.11 \pm 0.65$	$4.12 \pm 0.48$	$3.40\pm0.46$	$3.38 \pm 0.47$	

Note:  ${}^*P < 0.05$ ,  ${}^{**}P < 0.01$ .

The difference in the aforementioned psychological factors was tested using the one-way analysis of variance. The results showed that the three psychological factors had significant differences in emotional commitment, ideal commitment, and total commitment (Table 4). Specifically, in terms of total commitment, the order was as follows: professional willingness: independent choice > obedience > others' willingness; professional vision: popular expectation > general expectation > unpopular expectation; and professional effectiveness: self-conscious excellent > self-conscious average > self-conscious poor. The difference in emotional commitment and ideal commitment was the same as that in total commitment. Additionally, the differences between different professional intentions in continuing commitment were extremely significant (independent choice > others' willingness > obedience to adjustment), and the differences between different professional visions in normative commitment were significant (popular expectation > unpopular expectation > general expectation), and the differences in continuing commitment were extremely significant (self-conscious excellent > self-conscious average > self-conscious poor). Therefore, professional

intention, vision, and effectiveness greatly influenced freshmen's professional commitment level. Independent choice of major, expectation of a popular major, and high professional effectiveness can bring about a higher level of professional commitment level.

Table 4. Difference test of different psychological factors in each dimension and the total score of
professional commitment

Source of difference	Emotional commitment		Ideal commitment		Normative commitment		Continued commitment		Total commitment	
	Df	F	Df	F	df	F	Df	F	df	F
Professional intention	2	18.413***	2	17.790***	2	2.284	2	22.145***	2	20.546***
Professional vision	2	9.175***	2	23.586***	2	4.617*	2	22.800***	2	20.152***
Professional effectiveness	2	19.528***	2	14.627***	2	2.621	2	1.817	2	12.599***

Note:  ${}^*P < 0.05, {}^{**}P < 0.01.$ 

## 4 Influencing factors and training of freshmen's professional commitment

4.1 Freshmen's professional commitment as a whole is in the middle level; therefore, they should establish their professional ideal based on their learning responsibility

The average score of total commitment for freshmen was between 3 and 4, which was above the average. Of the four dimensions, the average score of normative commitment was the highest (basically higher than 4 points), and most of the influencing factors had no significant differences in this dimension (only the major vision factor had a significant difference). Compared with the other three dimensions, freshmen had a clearer and more stable attitude toward their learning responsibilities and obligations. This might be due to the emphasis on the importance of learning attitudes in primary and secondary schools. The average score of ideal commitment was the lowest. Compared with the other three dimensions, freshmen were unsure whether their major suited them and whether it would help them establish career goals and ideals.

Before entering university, the college entrance examination has always been a beacon for the majority of students, integrating the multiple expectations of society, schools, parents, and students themselves. To some extent, this examination has become the end of learning for many students. Middle school students have few channels and space to think about professional learning on college campuses. Even after filling in the college entrance examination, students' cognition of professional learning remains suspended, vague, and fragmented, which foreshadows the confused mood of freshmen in the next few years.

The most convenient way to cultivate freshmen's professional commitment is to strengthen students' awareness of learning responsibility, that is, to make good use of normative commitment in professional commitment. Normative commitment is the responsibility and obligation of students for their major, indicating the degree of correlation between adherence to the choice of major and self-requirements. In the course of 12 years of basic education from primary school, teachers and parents may place the greatest emphasis on the sense of responsibility for learning; for example, "we must study hard and enter a good university." Long-term continuous acceptance

and internalization of learning constitute the psychological basis of the freshman's professional learning. Test scores and ratings in college can still awaken the anxieties developed in middle school, even as students' enthusiasm for everyday classroom learning declines. At present, some parents or middle school educators are still inculcating the views "college entrance examination is the last shot" and "it is easy to enter the university" to inspire senior high school students. This perhaps has led to senior high school students equating university with "easy learning", making it challenging to maintain the normative commitment of freshmen; therefore, they fail to realize the long-term and urgent professional learning in time. At the same time, college educators should strengthen the construction of professional cognitive learning and learning style immediately after freshman enrollment, and establish a stronger sense of responsibility for professional learning.

The most long-term way to cultivate freshmen's professional commitment is to help students establish professional ideals as soon as possible, that is, to make good use of the ideal commitment in professional commitment. According to the data, ideal commitment had the lowest score among the four components of professional commitment. Ideal commitment means students recognize that their major can promote the realization of their own ideals, and it is the deep integration of the professional value system and the realization of their own value. Establishing professional ideals should be an important factor for students, parents, and middle school and university educators. Professional learning is not just the central task of college students' study but an essential guide for current value judgment and future career development. The crisis of professional identity is bound to induce many negative effects on college students, such as self-doubt, self-avoidance, and even self-abandonment. The best time to start the construction of a professional ideal is from the middle school stage. Education should let middle school students, as far as possible, understand the uncommon majors, occupations, and their relationship with the course, at least so that they can keep them in mind before filling in the college entrance examination [6]. Once in college, education should expose new students to the more positive future possibilities offered by their major as soon as possible.

# 4.2 Cultivating freshmen's professional commitment and strengthening their psychological construction

This study selected three representative influencing factors from two aspects of demographic variables and psychological factors for analysis. The results showed that sex and student origin background in demographic variables had little impact whereas professional intention, professional vision, and professional effectiveness in psychological factors had a greater impact on freshmen's professional commitment level. The process of freshmen building professional commitment has been found to be controllable, therefore, the improvement in professional commitment can be achieved by strengthening their psychological construction.

First, from the perspective of professional willingness, freshmen show an obvious need for autonomy. Contrary to the higher level of professional commitment shown by self-choice, the lowest level of professional commitment is shown by freshmen guided by the will of others. Nowadays, freshmen choose their majors independently [7]. Therefore, maintaining their initiative of professional learning after admission is particularly important. In the long process of basic education, students' autonomy is often suppressed to a greater extent, and they are eager to obtain more

freedom. However, freshman autonomy should be stimulated gradually. They lack control over this autonomy and are prone to excessive relaxation in their learning state, which is more common among freshmen. Therefore, under the premise of strengthening the construction of the style of study, university education should gradually stimulate students' autonomy through the construction of professional ideals so that they truly feel the positive impact of professional learning.

Second, from the perspective of professional vision, the good expectation of professional development is also an essential factor to maintain the professional loyalty of freshmen. Many freshmen lack the necessary understanding of professional prospects before entering school, and they often choose their future major under the promotion of a certain public opinion environment. Majors that seem "hot" are more attractive, but "hot" majors are in a dynamic state of change. Too much emphasis on the external utilitarian attributes of the major results in a large psychological gap after the admission of many students, and they give up professional learning. Therefore, college education should not overemphasize the utilitarian attribute of the major to build a beautiful vision of the students for their major, but should start from the two aspects of major matching and career planning. On the one hand, college education should build a bridge between students and majors. Students have their unique personalities, and majors also have their malleability. A major can cover a variety of different personalities. In reality, people often have a certain stereotype about a particular major, making the professional adaptation too narrow. Professional education should break these stereotypes, and educators should help students find their own compatibility with their major and reconstruct their professional vision. On the other hand, college education should start from the freshman to do a good job in career planning. The so-called "popular" or "unpopular" of a major is a general impression, specific to the individual. The future cannot be blurred by the general impression; otherwise, even the "popular major" cannot make students truly benefit. In particular, the employment situation is not good "unpopular majors"; students' reasonable career planning is more important. In short, university educators should do deep and detailed work to establish a good professional vision for students.

Third, academic confidence is an important force to maintain freshmen's professional loyalty from the perspective of professional effectiveness. In local ordinary undergraduate universities, the overall level of academic confidence of freshmen is not high. Also, how to help freshmen put down the burden of college entrance examinations and rebuild academic confidence is an important issue. The first thing freshmen have to face is the difficulty of adaptation after the change in the learning mode. College learning is obviously different from middle school learning. Middle school learning focuses on the entrance examination in the limited courses to achieve deep learning, and the classroom teaching time is long, detailed and detailed, the carrier of students' learning in the classroom. No specific and unique entrance examination exists as a guide for university study. The number of courses is large, involving a wide range of subjects. The classroom teaching time is limited and the rhythm is brisk; students need to complete various kinds of extended learning in ample time after class. It is difficult for freshmen to adapt to this learning mode in a short period, and they all "drop off" in class and cannot keep up with the rhythm of teachers. Difficulties in learning and adaptation, low professional identity, and failure in college entrance examinations have a negative impact on the self-efficacy of freshmen. Freshmen also have to face the lack of real-time evaluation and feedback systems for learning efficiency. In middle school, students can clearly grasp their learning status

and ability through high-density examinations. However, freshmen no longer receive high-density evaluation feedback, and the negative emotions that may be brought by the unknown further reduce their professional efficacy. Therefore, considering the aforementioned situation, college education should smoothly transform the learning mode for freshmen. First, a professional learning mode needs to be vigorously established as soon as possible to improve the professional efficiency of freshmen by better adapting to the situation. Second, a richer learning efficiency feedback mechanism needs to be established so that freshmen can dynamically grasp their own learning state.

# 4.3 "Bring the new with the old" to enhance the positive professional learning experience of freshmen

Many freshmen need quite a long time to adapt to the university learning environment. This adaptation is often beyond their previous cognitive experience. Some students in their senior years of university still cannot get rid of the shackles of middle school learning mode because middle school learning and university learning are two very different cognitive categories. Secondary school learning has more "obedience" parts, has more scores, is ranking oriented, and has more incentives from family and school. These factors push high school students to achieve better academic achievement, which leads them to better universities and majors.

In the process of freshmen adaptation, colleges and universities should grasp this time window, make good use of the academic mode so that freshmen continue from middle school, gather new strengths, and instill new professional learning requirements. Moreover, colleges and universities should pay close attention to the quality of teaching so that students gain more in the classroom and improve the positive emotional experience in the classroom. Specifically, universities can focus on the following two areas.

- (1) Strengthen the professional learning-oriented training of freshmen [8] and promote the transformation of the old college entrance examination learning mode into the new professional learning mode. Professional learning orientation can refine the specific requirements of professional learning in the way of high school—clear and inspiring, integrating normative commitment and ideal commitment to lay a solid foundation for subsequent professional learning.
- (2) Strengthen teachers' feelings of education, especially teachers' professional sense of belonging, professional achievement, and emotional support for students in the classroom. The profession is abstract, but the professional teacher is concrete. Also, the teacher's emotional support that students really perceive can promote the improvement in professional commitment [9]. Therefore, professional teachers in the teaching line should undertake multiple tasks such as output, inspiration, and motivation.

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