

Study on the Relationship Between Professional Commitment and Learning Burnout of Undergraduates Majoring in Public Administration

Tong Xiao

Yantai Institute of China Agricultural University, Yantai Shandong Province 264670, China

Abstract: In order to understand the relationship between professional commitment and learning burnout of undergraduates majoring in public utilities management, the students majoring in public utilities management in C University were coded, and 100 undergraduates with different gender, household registration and classes were randomly selected to distribute scales, and 97 valid scales were collected. Descriptive statistics, one-dimensional linear regression model and multiple linear regression model were used for empirical research. The results show that the emotional commitment factor in professional commitment has a significant impact on the degree of learning burnout. By studying the relationship between professional commitment and learning burnout of undergraduates majoring in public utilities management, this study aims to help students establish a correct professional concept, enhance their professional identity and reduce their learning burnout. And put forward some suggestions for the development of public utilities management specialty to cope with the development crisis of public utilities management specialty.

Keywords: Public Administration, Professional commitment, Learning burnout.

1. Introduction

The major of public utilities management belongs to the discipline of public administration, and it is a new major with multi-disciplinary integration. It mainly trains high-quality compound public management talents for public departments such as party and government organs, institutions and non-governmental organizations. The major of public utilities management in colleges and universities in China started late and developed rapidly. However, some college teachers pointed out that the major of public utilities management was vague, the core competitiveness of courses was not strong, and the employment direction of students was vague. Some opinions of the Ministry of Education on improving the quality of higher education in an all-round way and opinions of the Ministry of Education on deepening the teaching reform of undergraduate education and improving the quality of personnel training in an all-round way emphasize that it is necessary to firmly establish the central position of personnel training and establish a scientific concept of higher education development; Guided by the needs of economic and social development and students' career development, we will deepen the supply-side reform of colleges and universities. In recent years, the major of public utilities management is facing the dilemma and crisis of large-scale cancellation.

At the same time, undergraduates majoring in public utilities management in colleges and universities generally have problems such as low interest in learning professional knowledge and low degree of professional identity, which shows the characteristics of bad learning behavior such as truancy, lateness, leaving early and low learning efficiency, which affects the quality of professional teaching. Studying the relationship between professional commitment and learning burnout of undergraduates majoring in public utilities management is not only conducive to guiding students to establish a correct learning concept and professional concept, enhancing professional identity and

reducing the degree of learning burnout; But also provides a new perspective for solving the bottleneck of the development of public utilities management specialty.

2. Literature Review

2.1. Concept

Learning burnout: The concept of learning burnout is extended from the study of job burnout. Learning burnout refers to the negative state of students' depressed mood, behavior avoidance and low sense of accomplishment due to lack of interest in learning or academic pressure.

Professional commitment: Professional commitment refers to the positive attitude and behavior of college students who agree with their major and are willing to make corresponding efforts, including four dimensions: emotional commitment, ideal commitment, continuing commitment and normative commitment.

2.2. Correlation research

Professional commitment and learning burnout are two important indicators reflecting students' learning psychology. According to the research, professional commitment is one of the main factors that affect the degree of learning burnout.

Scholars at home and abroad generally believe that there is a significant negative correlation between learning burnout and professional commitment, that is, the higher the level of professional commitment, the less students will show learning burnout[3]. Yang Lixian, Lian Rong (2006) and others have studied the relationship between learning burnout and professional commitment, and the results show that there is a negative correlation between them. In regression analysis, emotional commitment has the highest influence index on learning burnout and its dimensions, which shows that college students' love of majors affects their learning burnout level[1]. Duan Lusheng and Li Yongxin (2008) introduced the variable of learning engagement to study the relationship among

college students' professional commitment, learning burnout and learning engagement. The results show that there is a significant positive correlation between learning engagement and professional commitment, and a significant negative correlation between learning burnout. The dimensions of learning burnout and professional commitment have a significant predictive effect on learning engagement[2]. Chen Rui (2011) concluded that emotional commitment is the most important predictor of college students' learning burnout after studying the correlation among college students' learning burnout, professional commitment and test anxiety. Test anxiety is the second most important predictor of depression and low sense of accomplishment[4]. Chen Jiasheng (2011) pointed out that professional commitment, especially emotional commitment, can effectively predict the learning burnout of newly-promoted college students after studying the learning burnout and professional commitment of freshmen[5].

At present, the research on the relationship between professional commitment and learning burnout focuses on college students in professional universities (such as medical students, normal students, physical education students, etc.), and takes demographic variables as the main variables to study the status quo of learning burnout and professional commitment of different gender, grade, major, college and other college students.

2.3. Literature basis

At present, the research on learning burnout and professional commitment at home and abroad is mainly empirical research, and the research content is gradually enriched, but there is still room for development. First of all, the definition of learning burnout and the quantification of learning burnout are too dependent on the existing research results of "job burnout". Secondly, there are few measuring tools for learning burnout and professional commitment according to China's national conditions. Professor Lian Rong's learning burnout and professional commitment scale

is widely recognized in China, but the theory follows the three-factor model, and the scale has not been tested for validity and has not been revised for more than ten years, so its validity is difficult to guarantee[6]. Finally, at present, the academic research on the relationship between professional commitment and learning burnout mainly focuses on the students of professional universities, such as medical students, normal students and physical education students, but lacks the research on the students of comprehensive universities, and there are still gaps in the related research on the undergraduates majoring in public administration.

3. Research Design

3.1. Data source

In this study, the data of quantitative research were collected through questionnaires. Taking the students majoring in public utilities management in C University as the scope of questionnaire survey, the analysis unit is individual.

The study adopts the sampling method of simple random sampling. The sampling unit is 133 students in four classes of public utilities management major in C University. They are numbered from 1 to 133, and 100 numbers are extracted by using random number table software, and self-administered questionnaires are distributed to students with corresponding numbers. A total of 100 questionnaires were distributed, and 97 questionnaires were actually recovered. 97 valid samples were investigated, including 32 boys, accounting for 32%; There are 65 girls, accounting for 65%. The urban population is 63, accounting for 64.95%; The rural population is 34, accounting for 35.05%. There are 23 students in Class A, 22 students in Class B, 28 students in Class C and 24 students in Class D, accounting for 23.71%, 22.68%, 28.87% and 24.74% of the total sample respectively. The top 20% of the majors are 21 students, 25 students with 21%-40%, 16 students with 41%-60%, 20 students with 61%-80%, and 15 students with 81% or below, accounting for 21.65%, 25.77%, 16.49% and 20 respectively.

Table 1. Sample basic situation table

	Feature	People	Percentage
Gender	Male	32	32%
	Female	65	65%
	Total	97	100%
Household registration	City	63	64.95%
	Village	34	35.05%
	Total	97	100%
Classes	A class	23	23.71%
	B class	22	22.68%
	C class	28	28.87%
	D class	24	24.74%
	Total	97	100%
Rank	1%-20%	21	21.65%
	21%-40%	25	25.77%
	41%-60%	16	16.49%
	61%-80%	20	20.62%
	81%-100%	15	15.46%
	Total	97	100%

3.2. Index selection and analysis method

In the research part, the study burnout scale for college students compiled by Yang Lixian and the professional commitment scale for college students compiled by Wu

Lanhua were selected to operationalize the concept of study burnout and divide it into three dimensions: depression, improper behavior and low sense of accomplishment. The scale adopts Likert five-level self-rating scale, from "incomplete conformity" to "complete conformity" with five-

level integral system. In terms of depression, improper behavior and low sense of accomplishment, the higher the score, the higher the degree of burnout; The lower the score, the weaker the burnout. The study divides professional commitment into four dimensions: emotional commitment, ideal commitment, normative commitment and continuing commitment. The higher the score in the four dimensions, the stronger the professional commitment.

Table 2. Reliability test table

Sample	Number	Cronbach.
97	13	0.792

As shown in Table 2, the internal consistency reliability coefficient of the scale used in this study is 0.792, and the scale has high reliability and good stability.

Table 3. Validity test form (KMO and Bartlett test)

Kaiser-Meyer-Olkin	Chi-Squared	Bartlett	
		df	Sig.
0.798	1642.101	351	0

Table 4. Correlation Analysis of Learning Burnout and Professional Commitment

	Emotional	Ideal	Continue	Normative	Down spirits	Misconduct	Low sense	Professional commitment	Learning burnout
Emotional	1								
Ideal	.777**	1							
Continue	.551**	.645**	1						
Normative	.597**	.685**	.596**	1					
Down spirits	-.276**	-.229*	0.032	0.001	1				
Misconduct	-.250*	-0.09	-0.013	-0.006	.539**	1			
Low sense	-.272**	-.232*	0.009	-0.122	.536**	.399**	1		
Professional commitment	.870**	.916**	.783**	.847**	-0.153	-0.113	-0.196	1	
Learning burnout	-.326**	-.222*	0.011	-0.046	.861**	.811**	.765**	-0.186	1

Note: ** . Significant correlation at 0.01 level (bilateral).

*. Significant correlation at 0.05 level (bilateral).

As can be seen from Table 4, the four factors of professional commitment have a strong statistical correlation, and the three dimensions of learning burnout also have a strong statistical correlation. However, the correlation between professional commitment and learning burnout did not reach a significant level ($p=0.069$), $r=-0.186$.

From the four factors of professional commitment, the average score of learning burnout is negatively correlated with emotional commitment and normative commitment, and the correlation coefficients are -0.326 and -0.222, respectively, which shows that emotional commitment and ideal commitment in professional commitment have a significant impact on learning burnout among students majoring in public administration in C University. Depression is negatively correlated with emotional commitment and ideal

As shown in Table 3, KMO value =0.772, which is between 0.7 and 0.8, indicating good validity.

Statistical analysis uses SPSS27.0 software for data analysis and descriptive statistics for related variables; This paper makes an empirical analysis on the influence of professional commitment on learning burnout of undergraduates majoring in public utilities management by using monistic linear model and multivariate linear model.

4. Research Results

4.1. There is no significant correlation between learning burnout and professional commitment and regression.

4.1.1. Correlation Analysis of Learning Burnout Dimensions and Professional Commitment Factors

In order to explore the relationship between learning burnout and professional commitment of students majoring in public utilities management in C University, this study first analyzes the correlation between various dimensions of learning burnout and various factors of professional commitment, and obtains Pearson correlation coefficient. The results are shown in Table 4.

commitment, improper behavior is negatively correlated with emotional commitment, and low sense of accomplishment is negatively correlated with emotional commitment and ideal commitment.

4.1.2. 4.1.2 A Linear Regression Analysis of Professional Commitment and Learning Burnout

The results of correlation analysis show that there is a statistically significant correlation between professional commitment and learning burnout. In order to carry out the next research, the average learning burnout is divided into dependent variables (represented by Y) and the average professional commitment is divided into independent variables (represented by X) for regression analysis.

Table 5. Regression Model Test of Professional Commitment on Learning Burnout (N=97)

Model		Sum of square	df	Mean square	F	Sig.
1	Return	1.612	1	1.612	3.386	.069a
	residual	45.226	95	0.476		
	Total sum	46.838	96			

Regression note: $R=0.186$, adjusted r square =0.024.

A. Predicted variable: (constant), average score of professional commitment

B. Dependent variable: average score of learning burnout

As shown in Table 5, with professional commitment as the independent variable and learning burnout as the dependent variable, the univariate linear regression analysis is made, $\text{sig.}=0.069>0.05$, so the regression equation of professional commitment to learning burnout of students majoring in public administration in C University is not statistically

significant.

4.2. Emotional commitment has a significant impact on learning burnout.

Taking the factors of professional commitment as independent variables and learning burnout as dependent variables, multiple linear regression was carried out by using the method of all forced inclusion.

Table 6. Prediction Model of Professional Commitment on Learning Burnout

R	R2	Adjust R2	Error of SE	Change statistics				
				R2	F	df1	df2	Sig. F
0.420a	0.177	0.141	0.647	0.177	4.935	4	92	0.001

Note: A. Predicted variables: (constant), normative commitment, continuing commitment, emotional commitment and rational commitment. B. Dependent variable: total score of learning burnout

Table 7. Multiple Regression Model Test of Professional Commitment on Learning Burnout (N=97)

Model		Sum of square	df	Mean square	F	Sig.
1	Return	8.275	4	2.069	4.935	0.001a
	residual	38.563	92	0.419		
	Total sum	46.838	96			

Note: $p=0.001$, $R=0.420$, $R =0.177$.

A. Predicted variables: (constant), normative commitment, continuing commitment, emotional commitment and ideal commitment.

B. Dependent variable: average score of learning burnout

The test results of regression model are shown in Table 7, which shows that the regression equation is reliable and can

be established.

Table 8. Regression Analysis of Professional Commitment and Learning Burnout

Model	Variable	B	SE	Standard coefficient	t	Sig.
1	Constant	2.594	0.3		8.639	0
	Emotional	-0.321	0.109	-0.449	-2.947	0.004
	Ideal	-0.119	0.129	-0.162	-0.926	0.357
	Continue	0.266	0.135	0.255	1.975	0.051
	Normative	0.134	0.101	0.181	1.328	0.187

Note: A. Dependent variable: average score of learning burnout

The results in Table 8 show that the constant term $t=8.639$, $\text{sig.}=0.000<0.001$, which shows that the constant term coefficient of the multivariate regression equation is meaningful. Because the coefficient $\text{sig.}>0.05$ of ideal commitment, continuing commitment and normative commitment, these three factors cannot enter the multiple regression equation, but emotional commitment factor can enter the regression equation. The standardized regression equation of the model is obtained from the above statistical results:

$$\text{Learning burnout} = 2.594 - 0.321 \times \text{Emotional commitment}$$

$$(p = 0.000) \quad (p = 0.004)$$

From the above regression equation, we can know that the learning burnout will decrease by 0.321 units for each unit of emotional commitment of the sample.

4.3. Emotional commitment can predict all dimensions of learning burnout.

Table 9 shows the regression analysis of each factor of professional commitment to each dimension of learning burnout.

Table 9. Stepwise regression analysis of the factors of professional commitment on the dimensions of learning burnout

Dependent variable	Independent variable	Non-standardized coefficient Beta	T	Sig. T	VIF	Adjust R2	F	Sig. F
Down spirits	Emotional	-0.394	-3.653	0	1.436	0.107	6.729	0.002**
	Continue	0.361	2.293	0.024				
Misconduct	Emotional	-0.232	-2.512	0.014	1.000	0.052	6.311	0.014*
Low sense	Emotional	-0.21	-2.752	0.007	1.000	0.064	7.571	0.007**

Note: * $\text{sig} < 0.05$; ** $\text{Sig} < 0.01$; *** $\text{Sig} < 0.001$

Table 9 shows that emotional commitment and continuing commitment have a significant impact on the depression of students majoring in public utilities management in University C; Emotional commitment can predict students' improper behavior and low sense of accomplishment; Emotional commitment can greatly predict students' low sense of accomplishment.

4.4. Analysis

Taking the students majoring in public administration in C University as subjects, there is no significant correlation and linear regression between professional commitment and learning burnout, which is different from the previous research results in academic circles. However, the significance of 0.069 is close to the standard of 0.05. Emotional commitment in professional commitment has a significant negative correlation and regression relationship with the average score of learning burnout and all factors. Ideal commitment has a significant impact on depression and low sense of accomplishment, and continuing commitment will affect the variables of depression. Emotional commitment and continuing commitment can explain learning burnout to some extent in gradual regression. Therefore, this paper agrees with the way to reduce the level of learning burnout by improving the level of professional commitment.

At the same time, the results of multiple regression analysis show that emotional commitment and continuing commitment are effective predictors of learning burnout of students majoring in public administration in C University, and emotional commitment has the highest explanatory capacity in the whole model. If we can cultivate the public spirit of college students majoring in public utilities management, help them to establish correct professional concepts and understand professional values, and thus improve their interest in learning, then we can greatly reduce their learning burnout.

5. Suggestion

5.1. University level

Colleges and universities should hold a scientific, responsible and rational attitude and methods to implement the construction of public utilities management specialty, and actively explore ways and methods to improve the professional development level.

Colleges and universities should strengthen practical teaching of public administration major, add practical education courses of public administration major, construct three-dimensional teaching mode, help students understand and understand the working nature of government agencies, institutions and non-profit organizations through social practice and internship, explore the value and significance of public administration major, and cultivate practical talents of public administration; Curriculum ideological and political reform should be carried out to effectively integrate the teaching of public utilities management with curriculum ideological and political education, promote the formation of professional values and improve students' professional commitment level. At the same time, colleges and universities should take the needs of economic and social development and students' career development as the guide, deepen the supply-side reform of public utilities management specialty,

improve the student training program, and screen the repetitive, tedious and vague course content; We should make use of our own superior resources to formulate and implement effective employment policies for graduates, positively guide the fresh graduates to pay attention to their personal development, make a good career plan, and locate the employment direction, so as to help students find jobs while meeting social needs and improve the professional recognition of colleges and universities in the industry.

5.2. Teachers level

Teachers improve teaching quality by optimizing teaching content, optimizing course assessment methods and improving their own quality, so as to help students love learning professional knowledge and realize the value of learning and the fun of innovation. Teachers in colleges and universities should lay a solid theoretical foundation, combine the laws of students' physical and mental development and cognitive level, and appropriately extend the teaching content in depth and width; Enrich and update the teaching case base; Strengthen applied and practical courses to improve students' professional ability and emotional commitment. According to the teaching experience, college teachers can optimize and adjust the course evaluation system of public utilities management major, such as setting the degree of examination questions and setting different homework weights, so as to build a reasonable evaluation system for the development of teaching objectives and prevent the phenomenon of putting the cart before the horse, which leads students to memorize textbook knowledge with high scores instead of flexible operation. At the same time, teachers should adhere to the concept of lifelong learning, constantly improve their knowledge level, keep pace with the times, and conform to the requirements of the times and the construction of public utilities management disciplines.

5.3. Student level

Education should be people-oriented and student-oriented. As the main object of higher education, undergraduates should start from themselves, mobilize their enthusiasm, change their learning concepts and improve their emotional commitment.

Undergraduate students majoring in public utilities management should establish practical learning goals, and students can get positive feedback through the realization of the goals, gradually find their own learning methods and strategies, and gradually realize the value of knowledge, the fun of learning and the sense of accomplishment; We should establish a correct view of learning, think rationally about the significance of learning, resist the influence of learning utilitarianism, get to know the public sector in the process of learning theoretical knowledge and conducting practical research activities, realize the important significance of public utility management specialty to national development and social progress, deepen professional identity and cultivate the spirit of public service; We should cultivate learning interest, adjust learning attitude in time, look at the history and future development of the discipline from an objective and dialectical point of view, and gradually form correct professional values on the basis of fully understanding the majors we have studied; We should do a good job in career planning, improve professional quality and core competitiveness with employment as the guidance, and strive

to become a compound and applied public management professional for the purpose of meeting social needs.

5.4. Social level

The cancellation of the major of public utilities management does not mean that the public departments such as administrative organs, social organizations and non-profit organizations have little demand for public management talents, and there is an imbalance between the supply of colleges and universities and the social demand; On the contrary, under the background of government transformation, the society needs compound and applied public utility management professionals to provide public services. At present, the social recognition and social influence of public utilities management major are low, and some employers lack the understanding of public utilities management major and the feelings of students' professional quality[7], and even have doubts and prejudices about this major under the influence of public opinion. Therefore, the government and enterprises should establish effective communication and cooperation mechanisms with universities, communicate directly with university teachers and students through school-enterprise cooperation and construction of practice bases, so as to understand the value and significance of the major of public administration, enhance the social recognition of students majoring in public administration, enhance the social influence of the major, and open up employment channels for graduates majoring in public administration, thus realizing the situation of resource sharing, information exchange and win-win cooperation[8].

References

- [1] Lian Rong, Yang Lixian, Wu Lanhua. College students' professional commitment, learning burnout and their relationship. *Psychological Science*, 2006(01):47-51.
- [2] Duan Lusheng, Li Yongxin. The relationship between college students' professional commitment, learning burnout and learning engagement [J]. *China Journal of Health Psychology*, 2008(04):407-409.
- [3] Zhang Maolin. Study on the current situation of learning burnout of normal students in special education and its relationship with professional commitment. *China Special Education*, 2013(6):3-8
- [4] Chen Rui. Study on the correlation among college students' learning burnout, professional commitment and test anxiety. *Journal of Nanchang Institute of Education*, 2011 (06): 124-126.
- [5] Chen Jiasheng. The relationship between learning burnout and professional commitment of newly-promoted college students. *Journal of Pingxiangshan College*, 2011(07):03-05
- [6] Chen Jiasheng. Research Status and Prospect of Learning Burnout [J]. *China Journal of Health Psychology*, 2016,24(06):939-943.
- [7] Zheng Dailiang. Crisis and prospect of the development of public utilities management in colleges and universities [J]. *Heilongjiang Education*, 2023(19):1-6.
- [8] Lu, J., & Yang, G.-S. (2023). A Review of Research Methods of Land Resources Carrying Capacity. *Frontiers in Sustainable Development*, 3(3), 79–88. <https://doi.org/10.54691/fsd.v3i3.4552>