

The Relationship between Job Satisfaction, Organizational Commitment, and Turnover Intention of Doctoral Lecturers: A Case Study of Universities in Mianyang, China

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Abstract

This article aimed to investigate the relationship between organizational commitment and job satisfaction towards doctoral lecturers' turnover intention in Mianyang, China. From the target population of 904 doctoral lecturers who has been working in 9 universities in Mianyang, China, there were 302 samples selected by adopting purposive sampling method according to Yamane's Equation Formula. The instrument for collecting data was a questionnaire. This study was a quantitative research by using survey. The main tools of analysis were frequency, percent and linear regression analysis to test variables and to test hypothesis. All tests were based on 0.05 level of significance. From the analysis results, Doctoral lecturers' job satisfaction, organizational commitment had negative relationship on turnover intention. There was significant relationship between doctoral lecturers' job satisfaction, organizational commitment and turnover intention. Therefore, it also recommended among others that governments, society, and universities should pay more attention to doctoral lecturers' job satisfaction, effectively prevent them from forming a turnover intention, and stabilize them as a team. The university should develop the management countermeasures of young doctoral teachers from reducing the wastage rate to monitoring and managing the turnover intention, warning the brain drain crisis in time, making good plans ahead of time, and promoting the university to improve the talent growth environment. And universities need to improve the talent-growing environment and the management level, promoting the sustainable development of doctoral lecturers.

Keywords: Job Satisfaction, Organizational Commitment, Turnover Intention

Introduction

With a new wave of scientific and technological and industrial revolutions raging, universities throughout the world are becoming more competitive. Many researches (Xu Zhiping et al, 2019) shows that the higher the level of universities, the higher the proportion of doctoral lecturers among full-time teachers and the lower the active turnover rate of doctoral teachers. At present, the active turnover rate of doctoral lecturers in general universities is continuously rising, and has reached a new climax, as shown in Figure 1.



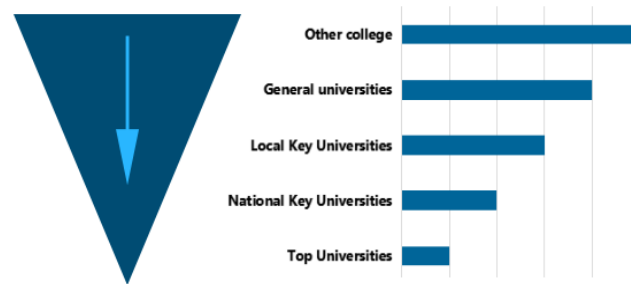


Figure 1 The Active Turnover Rate of Doctoral Lecturers in Chinese Universities
Source: Xu Zhiping et al (2019)

Mianyang as one of the third-tier cities and the only science city in China, the turnover rate of doctoral lecturers in universities is higher than in other universities of other cities. And the construction of doctoral lecturers in universities in Mianyang is still facing great difficulties, including recruiting foreign doctors. However, previous researches have studied a few on the active turnover intention of high-level talents in universities. Therefore, this study takes the doctoral lecturers in Mianyang as the research target population, using a quantitative approach, and the main data analysis methods including descriptive statistics analysis and linear regression analysis. Doctoral lecturers are especially important to the university. Doctoral lecturers are the core strength of university development. The number and quality of doctoral lecturers determine the competitiveness of the university. Therefore, it is important to analyze the relationship between job satisfaction, organizational commitment and the turnover intention to retain high-level talents to promote the development of the universities.

Research objective

To investigate the relationship between organizational commitment and job satisfaction towards doctoral lecturers' turnover intention.

Hypotheses of research

Based on analyses of previous researches, and taking account of characteristics of university doctoral lecturers, this study proposes the following two hypotheses.

H1: There is significant relationship between doctoral lecturers' job satisfaction and turnover intention.

H2: There is significant relationship between doctoral lecturers' organizational commitment and turnover intention.

Literature Review

Turnover has a very significant impact on doctoral teachers' life, family and career development, and the turnover is irreversible. Doctoral teachers show their intention to quit before they officially do. Turnover intention is the possibility of an employee to change his or her job within a certain period of time. The turnover intention has important feedforward control on turnover behavior. Therefore, it has vital significance to study the turnover intention of doctoral teachers in order to retain the talents to facilitate the development of universities.

March and Simon (1958) first studied employee turnover intention, and defined it in "Organizations" as "the strength of individuals who want to leave the current job and look for other job opportunities." Later, Porter and Steers (1973) regarded the active turnover intention



as the next state of mind after the employee experienced dissatisfaction. Then, Mobley (1977) defined active turnover intention as "a state of mind when employees work in a particular organization for a period of time and are determined to leave the organization after consideration." Zhang Liping (2013) believed that the active turnover intention was the idea and willingness of employees to leave the organization due to their own or external factors.

Price (1997) believed that job satisfaction was staff's emotion in their work organization for specific job roles and work environment. Hoppock (2011) held that job satisfaction was an employee's psychological, physiological, and satisfactory feelings about the work environment and the work itself, and it was a subjective response to the work situation. Chen Xiaohua (2016) pointed out that job satisfaction was the attitude and emotional experience of members of an organization in their work, including work itself, campus environment, academic atmosphere, and welfare benefits, etc.

Becker (1960) argued that the concept of organizational commitment reflected the psychological contract between employees and organizations. And Meyer (1993) also believed that organizational commitment was a bond that reflected the relationship between individuals and organizations. Organizational commitment has three forms: normative, continuing and emotional commitment. Tett and Meyer (1993) found that organizational commitment was a "predictor" of turnover intention. Chi-Sum, Wong (2001) also found that the organizational commitment had a predictive effect on turnover intentions and they were negatively correlated. Therefore, organizational commitment also has a predictive effect on turnover intentions.

Moore and Gardner (1992) analyzed the influencing factors of Michigan State University lecturers' turnover intention, and found that salaries, department leaders, department's reputation were among the top five which are closely related to work. Zhang Liping (2013) also studied the turnover intention of university lecturers from the perspective of psychological contract and she believed that the influencing factors of university teachers' turnover intention can be divided into social environmental factors, related attributes of the organization, the individual's mental state, and demographic variables such as age, gender, marital status, etc. Zhang Mian (2008) believed that job satisfaction and organizational commitment had a mutual influence, and both were important variables that affected teachers' turnover intention.

From the literature review, it can be found that job satisfaction and organizational commitment are both important variables that affect employees' turnover intention. Neither job satisfaction nor organizational commitment can fully explain and predict the employee's turnover intention. Only by combining the two can we better explain and predict the employee's turnover intention. It can be also found that few scholars put their research focus on the high-level talents. Jiao Xu (2017) studied the formation mechanism and management countermeasures of young scientific and technological talents' turnover intention in the Chinese Academy of Agricultural Sciences. Zeng Xiaojuan et al. (2015) conducted an empirical investigation on the turnover intention of young university teachers. Up to now, no relevant materials have been found for the study of university doctoral teachers' turnover intentions.

Therefore, based on previous research results and Maslow's Hierarchy of Needs Theory as the theoretical basis, this study took job satisfaction and organizational commitment as important factors affecting teachers' turnover intentions, job satisfaction and organizational commitment used as independent variables, and turnover intentions as dependent variables. By adopting the quantitative method to analyze whether there are significant relationships between organizational commitment, job satisfaction, and turnover intention, and whether there are



significant differences in the influence of different doctoral teachers' demographic factors on job satisfaction, organizational commitment, and turnover intention.

Conceptual Framework

As shown in Figure 2, the conceptual framework refers to the researches of Meyer and Allen (1991), Zhang Xue lian (2006), and Chen Xiao hua (2016) in order to study the university doctoral lecturers' turnover intention.

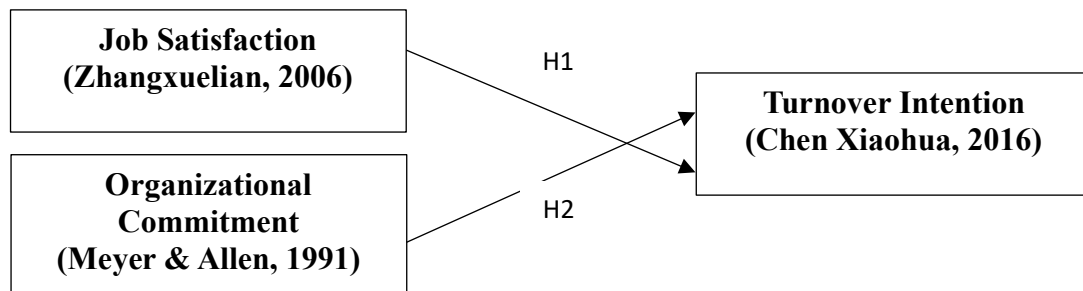


Figure 2 Conceptual Framework

Research Methodology

1. Population and samples of this research

This study is a quantitative research using survey questionnaire to collect data from 302 doctoral lecturers in 9 public universities in Mianyang City, China. Since the population were 904 doctoral lecturers, the sample size had calculated according to Yamane (1973) with 95 percent confidential interval, which was resulted in 302 samples.

2. Instrument of this research

The questionnaires were used in this research included four parts, respectively demographic profiles of respondents, their comments on job satisfaction organizational commitment, and turnover intention which were measured by using the Likert-5 scale (Likert, 1967). This study adopted Zhangxuelian's (2006) job satisfaction scale including university management, work itself, campus environment and academic atmosphere, interpersonal relationship and welfare under the Chinese context. The scales of organizational commitment from Meyer and Allen (1991) include continuance commitment normative commitment and affective commitment. The scales of turnover intention from Chen Xiaohua (2016) include factors of promoting teachers' turnover in universities, factors making teachers stay in universities, external factors of the university for teachers to stay, cost of turnover and choice of personal factors.

3. Data collection

The author applied purposive sampling to collect the data from the samples.

4. Data analysis

Descriptive statistics were applied to describe demographic variables. Pearson Correlation and Linear Regression analyses were employed to test hypotheses.

Research results

The results from the descriptive analysis on the demographic profile found that majority of the respondents were males (63.6%), the age group was 36- 45 years old (59.3%). assistant professors (65.9%), and the working years of the majority of doctoral lecturers are above 10 years.



We performed reliability testing. This study was using the Cronbach's coefficient to test the reliability of the data obtained from the survey. The reliability analysis showed that the overall alpha value of the questionnaire was 0.966, and the Cronbach alpha value of the independent organization commitment and job satisfaction were 0.849 and 0.977, respectively, and the Cronbach alpha value of the involuntary intention of the dependent variable was 0.879. The Cronbach alpha is greater than 0.8, indicating that the test or scale reliability is very good Chen Xiaohua (2016). In the KMO and Bartlett tests in this study, the Bartlett test Sig of the scale was 0.000. The overall KMO value was 0.912. The KMO values of organizational commitment and job satisfaction of independent variables were 0.828 and 0.956, respectively. The KMO value of turnover intention of the dependent variable is 0.808. This indicates that the validity of the test or scale is very good. Kaiser. H (1974).

Correlation analysis is used to study the correlation between five sub-dimensions of "job satisfaction" and "turnover intention" respectively. The results showed that the correlation coefficient between "job satisfaction" and "turnover intention" is negative in all the five sub-dimensions showing significance at the level of 0.01. The correlation coefficient is between -0.734 and -0.637, indicating that "job satisfaction" and "turnover intention" had a significant negative correlation as on Table 1.

Table 1 Correlation between Job Satisfaction and Turnover Intention

	Job Satisfac- tion	School Managem- ent	Work Itself	Campus Environm- ent and Academic Atmosphe- re	Interperso- nal Relationsh- ip	Benefi- ts	Turnov- er Intentio- n
Job Satisfac- tion	1						
School Managem- ent	0.909**	1					
Work Itself	0.910**	0.775**	1				
Campus Environme- nt and Academic Atmospher- e	0.669**	0.527**	0.584**	1			
Interperso- nal Relationsh- ip	0.888**	0.735**	0.798**	0.486**	1		
Benefits	0.916**	0.831**	0.761**	0.624**	0.737**	1	
Turnover	-0.649**	-0.734**	-	-0.669**	-0.733**	-	1



Intention	0.667 **	637**
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*Sig < 0.05, **sig < 0.01, ***sig = .000

It can also be seen from Table 2 that correlation analysis is used to study the correlation between three sub-dimensions of “organizational commitment” and “turnover intention” respectively. The results showed that the correlation coefficient between “organizational commitment” and “turnover intention” is negative showing significance at the level of 0.01. Specifically, the correlation coefficient between “emotional commitment” and “turnover intention” is -0.705, and the correlation coefficient between “continuance commitment” and “turnover intention” is -0.600.

Table 2 Correlation between Organizational Commitment and Turnover Intention

	Turnover Intention	Organizational Commitment	Continuance Commitment	Normative Commitment	Emotional Commitment
Turnover Intention	1				
Organizational Commitment	-0.588**	1			
Continuance Commitment	-0.600**	0.787**	1		
Normative Commitment	0.320**	0.799**	0.549**	1	
Emotional Commitment	-0.705**	0.833**	0.442**	0.456**	1

*Sig < 0.05, **sig < 0.01, ***sig = .000

The results from the regression analysis as shown on Table 3 revealed that there is significant relationship between job satisfaction and turnover intention of the doctoral lecturers in university in Mianyang at 0.000 level of significant ($F=42.203$). This results therefore accepted the H1: There is significant relationship between job satisfaction and the turnover intention of the doctoral lecturers in universities in Mianyang.



Table 3 The regression analysis between Job Satisfaction and Turnover Intention

	Model	Non-standardized coefficient		Standardized Coefficient	t	Sig.
		B	Standard error	Beta		
1	(Constant)	28.882	1.820		15.873	.000
	University Management	-.346	.173	-.211	-2.005	.046*
	Work itself	.303	.217	.153	1.397	.164
	Campus environment and academic atmosphere	.454	.202	.231	2.247	.025*
	Interpersonal relationship	-.205	.170	-.116	-1.209	.228
	Welfare	.515	.170	.327	3.025	.003**

a. Dependent variable: Turnover Intention

F-Statistic (F-probability) = 42.203 (0.000***)

*Sig < 0.05, **sig < 0.01, ***sig = .000

The results from the regression analysis as shown on Table 4 revealed that there is significant relationship between organizational commitment and turnover intention of the doctoral lecturers in university in Mianyang at 0.000 level of significant (F=61.248). This result, therefore, accepted the H2: There is significant correlation between organizational commitment and the turnover intention of the doctoral lecturers in universities in Mianyang.

Table 4 The regression Analysis between Organizational Commitment and Turnover Intention

	Model	Non-standardized coefficient		Standardized Coefficient	t	Sig.
		B	standard error	Beta		
1	(Constant)	24.710	1.990		12.418	.000
	Continuance to commitment	.950	.213	.289	4.467	.000***
	Normative commitment	.346	.208	.108	1.660	.098
	Affective commitment	.276	.143	.117	1.932	.004**

a. Dependent variable: turnover intention

F-Statistic (F-probability) = 61.248 (0.000***)

*Sig < 0.05, **sig < 0.01, ***sig = .000

In summary, all the hypotheses have been accepted as shown on Table 5.

Table 5 The summary of all the hypotheses

Hypothesis	Results
H1: There is significant relationship between doctoral lecturers' job satisfaction and turnover intention.	Accepted
H2: There is significant relationship between doctoral lecturers' organizational commitment and turnover intention.	Accepted

Discussion

This article aimed to study the relationship between job satisfaction, organizational



commitment and turnover intention, and this study took place in the universities in Mianyang, China as a case study. We concluded our findings as follows.

We analyzed the regression analysis between the independent variables and dependent variable. There is significant relationship between job satisfaction and turnover intention of the doctoral lecturers in university in Mianyang at 0.000 level of significant ($F=42.203$). In this research, the study indicated that welfare and campus environment and academic atmosphere had positive effect to turnover intention at 0.05 level of significant. However, we found that university management had a negative effect to turnover intention at 0.05 level of significant. In term of university management, there was a lack of university first prize system, reasonable and fairness of university reward and punishment system, and University position appointment, job title promotion system. This result is consistent with Rahman and Chowdhury (2012) that indicated teacher's turnover would happen due to professional development, promotional opportunity, and job security. In additions, welfare and campus environment or working atmosphere were an important factor to keep the lower of turnover intention of lecturer (Darling-Hommond & Sclan, 1996; Ingersoll, 2001; Stinebrickner, 2001; Murnane et al., 1991) as well as working conditions (Loeb, Darling-Hmmmond, & Luczak, 2003). In addition, there is significant relationship between organizational commitment and turnover intention of the doctoral lecturers in university in Mianyang at 0.000 significant ($F=61.248$). As the organizational commitment, we found that Continuance to commitment and Affirmative commitment were significantly positive relationship at 0.05 level of significant.

Last, the relationship between the variables of our study, job satisfaction and turnover intention had significantly relationship. Also, organizational commitment and turnover intention had significantly relationship. This is also consistent with the research of Zhang Mian (2008). He believed that job satisfaction and organizational commitment had a mutual influence, and both were important variables that affected teachers' turnover intention.

Suggestions

Based on the findings made from the study, the discussion of findings and the conclusion, we made the following recommendations:

A certain number of doctoral lecturers at universities with high comprehensive qualities is the foundation of the healthy development of the university, and their stability is closely related to the core competitiveness of universities, the teaching results of running schools and the sustainable development of higher education. To stabilize this team of young university doctoral teachers has become one of key concerns of the university administrations. Therefore, universities should take different measures to reduce the factors that lead to turnover intention of doctoral lecturers.

The results show that job satisfaction is significantly related to turnover intention, and organizational commitment is significantly related to turnover intention. Therefore, universities should pay high attention to organizational commitment, strive to improve the work of doctoral lecturers, prevent their turnover intention, and improve the stability of the doctoral lecturers.

The university should develop the management countermeasures of young doctoral teachers from reducing the wastage rate to monitoring and managing the turnover intention, warning the brain drain crisis in time, making good plans ahead of time, and promoting the university to improve the talent growth environment. And universities need to improve the talent-growing environment and the management level, promoting the sustainable development of doctoral lecturers.



Due to limitations of conditions and sensitivity of research contents, the samples in this study still have certain limitations. It needs to be further studied whether the conclusions from the public universities in Mianyang can be extended to other types of universities. In future studies, more university types should be added to obtain more comprehensive study results. Factors influencing the turnover intention of doctoral lecturers in universities are multi-dimensional. Especially, with the development of economy and society, the turnover intention of doctoral lecturers has become more and more complex. Government policy factors are not considered in this study. In future researches, new explanatory variables should be added to further analyze the turnover intention of doctoral lecturers in universities. As the study is mostly referred from Chen Xiaohua (2016), it needs analyses in depth and a larger number of respondents to analyze and get more accurate findings. More specific areas can be carried out for future researchers to study. In short, the work done in this study is phased and limited, and the follow-up research needs to be continued.

References

- Becker, H.S. (1960). Notes on the Concept of Commitment. *American Journal of Sociology*, 66(1), 32-40.
- Chen X.hua. (2016). *Investigation and Research on the Mobility Intention of Lecturers in Universities in Shaanxi Province*, M.A. Shaanxi Normal University.
- Chi-Sum, W., and Yui-tim, Wong, & et al. (2001). The Significant Role of Chinese Employees' Organizational Commitment: Implications for Managing Employees in Chinese Societies. *Journal of World Business*.
- Darling-Hammond, L., & Sclan, E. M. (1996). Who teaches and why. In J. Sikula (Ed.), *Handbook of Research on Teacher Education* (pp. 67-101). New York, NY: Simon Schuster Macmillan.
- Google. (2019, July1). Maslow's Hierarchy of Needs Pyramid. Retrieved July 2019. https://www.google.com/search?q=maslow%27+pyramid&source=lnms&tbm=isch&sca=X&ved=0ahUKEwjDp7rz38DjAhWm8XMBHWCMAoEQ_AUIECgB&biw=1280&bih=610.
- Ingersoll, R. M. (2001). *Teacher turnover, teacher shortages, and the organization of schools* (No. Document R-01-1). Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.
- Jiao X. (2017). Research on the Forming Mechanism and Management Countermeasure of the Turnover Tendency of Young Science and Technology Talents (Doctoral dissertation). *Chinese Academy of Agricultural Sciences Dissertation, Beijing*: 8-20.
- Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How Teaching Conditions Predict Teacher Turnover in California Schools. *Peabody Journal of Education*, 80(3), 44-70.
- Mobly W.H. (1977). Intermediate Linkages in the Relationship between Job Satisfaction and Employee Turnover. *Journal of Applied Psychology*, 62(2):237-239
- Murnane, R. J., Singer, J. D., Willett, J. B., Kemple, J. J., & Olsen, R. J. (1991). *Who will teach? Policies that matter*. Cambridge, MA: Harvard University Press.
- Porter, L.W., & Steers, R.M. (1973). Organizational Work and Personal Factors in Employee Turnover and Absenteeism. *Psychological Bulletin*, 80(2), 151-176.
- Price, & James, L. (1997). Handbook of Organizational Measurement. *International Journal of Manpower*, 18(4/5/6), 305-558.
- PD Moore. (1992). Faculty in a Time of Change: Job Satisfaction and Career Mobility. *College Faculty*, 36.



- Robert, Hoppock, H., Alan, & Robinson. (2011) Job Satisfaction Researches of 1949. Occupations: *The Vocational Guidance Journal*, 29(1).
- Stinebrickner, T. R. (2001). A dynamic model of teacher labor supply. *Journal of Labor Economics*, 19(1), 196-230.
- Tett, R.P., & Meyer, J.P. (1993). Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: *Path Analyses Based on Meta-analytical Findings*, 46(2), 259-293.
- Xu, Zhiping, Shen Hong & Zhang Bingbing. (2019). The Structural Characteristics and Causes of the Doctoral Rate of Full-time Teachers in Colleges and Universities in China. *Journal of Heilongjiang Higher Education Research*, Iss.02.
- Zeng Xiaojuan & Liu Chun. (2015) An Empirical Study on Turnover Tendency of Young Teachers in Higher Education Management. *Journal of Higher Education Management, Zheng Jiang*: 100-105.
- Zhang Liping. (2013) Research on University Lecturer's Turnover Intention Based on the Psychological Contract (Master Dissertation). *Harbin Engineering University, Harbin*: 16-17.
- Zhang Mian (2008) Reflections on Strengthening the Construction of Teaching Management Team in Higher Vocational Colleges. *Light industry Education of China, Xi'an*: 23-24
- Zhang Xuelian (2006). *The Study on the Relationship between Job Satisfaction Organizational Commitment and Turnover Intention among University Faculty in Shanxi*, M.A. Shangxi University, Taiyuan: 2-48.

