

University Postgraduate Students' Engagement in Learning and the Measurement Model based on Engagement Theory

Y.Ch.WANG & Y.N. LI

Xi'an University of Posts & Telecommunications, Xi'an, China

ABSTRACT: Whether postgraduate students have engagement in learning is one of the key factors affect the quality of postgraduate education. This paper starts with the view of the engagement, considering the main characteristics of postgraduate students, probes into the characteristics of university postgraduate students' engagement in learning based on the definition of the concept. And then constructs the structure model and measurement model based on the engagement theory.

KEYWORD: Engagement; Postgraduate students; Engagement in learning; Measurement model

1 INTRODUCTION

In recent years, with the enlarging of postgraduates recruiting, how to cultivate high-quality postgraduates becomes one of the focus of the competition and development of colleges and universities, which put forward some new challenges and requirements for postgraduate education and management. Now, research literatures on how to improve the quality of postgraduate education is more, while the perspectives are mostly confined to explore external conditions, there is a lack of discussion on the key inherent factors, postgraduates themselves. Social industrial transformation requires not only qualified postgraduates, but also high-quality ones. Therefore, it is of practical significance to explore the internal main factors affects the quality of postgraduate education.

The latest study on organizational behaviour suggests that employee engagement is the key factor that influences both employee performance and organization performance. To improve employee engagement is of great significance for the organization's survival and development, it has become one of hot topics in the study of management science. Postgraduate students, as the special "employees", their "academic performance" will inevitably subject to their "learning situation", it is "engagement in learning". Based on the above, this paper attempts to introduce engagement theory into postgraduate education, discuss postgraduate education problem from the perspective of whether postgraduate students have engagement in learning, and then provide theoretical support to promote postgraduate education effectively.

2 THE CONNOTATIVE DEFINITION AND RESEARCH VALUE

2.1 *The Connotation*

Employee Engagement was put forward by Kahn [1](1990), it was present as the concept of "Personal Engagement". After that, more and more scholars and consultants turn to define engagement from perspectives of their own researches. Generally consider that employee engagement exists in daily work, shows a lasting, general state of emotion cognition through specific work behaviour of the individual or other role activities, it is the level of effort employees make, which benefits their organizations and jobs.

Postgraduate students, as the special "employees", study and research are their core tasks, they also need "Personal Engagement", which is engaged in their roles in study and research, and act on physical, cognitive and emotional. It can be said that postgraduate students' engagement in learning is a kind of study and research related, positive, fulfilling, successful emotional and cognitive state; it has characteristics of energy, dedication and devotion. Generally speaking, postgraduate students' engagement in learning is embodied in two aspects of learning attitude and learning behaviour.

2.2 *The research value*

To explore the key internal factors affect the quality of postgraduate education, postgraduate students' engagement in learning, is mainly based on the following consideration.

2.2.1 *The objective demand of postgraduate students' personal growth*

Success science and psychology's research show that one's success is no doubt closely related to good timing, geographical convenience and harmonious human relations. But they are not the fundamental factors to succeed. The desire for success, the selection of goals, the accurate recognition of struggle road, struggle dedication and unyielding will in the process are the critical factors depend whether someone can succeed or not.

2.2.2 *The objective demand to optimize postgraduate students' training mode*

With the enlarging of the postgraduates recruiting, the level of social elite recognition of postgraduates is lower and lower, employment is becoming less and less optimistic. This requires postgraduates can not only achieve qualified, but also achieve a higher level among the others. There is a contempt even ignore of development on engagement in learning. In such a training mode, although universities make efforts to provide good external conditions for postgraduates, the quality of postgraduate education is not improved synchronously.

2.2.3 *The objective demand of knowledge economy times*

Postgraduate is a social group with higher quality talents, and is the critical power to promote sustained development of society, technology, economy. Modern society is a learning society and knowledge society. Knowledge updates faster and faster. This requires postgraduates are not only with high quality, but also able to constantly improve self-knowledge and continuous learning. It is demanding that postgraduates should make efforts to cultivate their interests in learning, attention, willpower and continuous learning ability at school.

3 DISCUSSION OF THE MODEL

3.1 *The characteristics*

With the analysis of the research literatures about the engagement at home and abroad, and combine with the specific situation of postgraduate study, this paper argues that postgraduate students' engagement in learning should have the several following characteristics.

Firstly, it is role-oriented. It has been proved when engagement was come up as the concept of "job involvement". It is called employee engagement only when employee plays a specific role. Similarly, postgraduate students' engagement in learning is also related with their roles. It is also said that the concept of engagement in learning exists to students.

Secondly, it is multi-dimensional. As mentioned above, most researchers agree that engagement is a multi-dimensional concept. But what dimensions the engagement includes and the specific connotations of them are still lack of consensus. Postgraduate students' engagement in learning is as well.

Thirdly, it is hierarchical. The divisions of engagement dimension usually showed hierarchically. For example, Hewitt Associates (2001) point out employee engagement can be divided into three levels (Say, Stay and Strive) [2]. And all levels must be progression step by step, which is after one achieves a certain level of expectations relatively, he will be to higher level.

Fourthly, it needs joint efforts of organization and postgraduates. Similarly, postgraduate students' engagement in learning not only reflects in that students improve academic performance for school honour, but also in the support and guidance from school. Only postgraduates and organization cooperate with each other can really cultivate high-engagement, high-performance postgraduates.

3.2 *The structural dimensions*

As mentioned above, postgraduate students' engagement in learning is role-oriented, multi-dimensional, hierarchical and of organizational encouragement. Refer to the partition rules of the structure dimensions of engagement point out by previous research scholars especially Hewitt Associates, Towers Perrin [2] and Saks [3]. This paper considers that the structure dimensions of postgraduate students' engagement in learning mainly include three dimensions: learning motivation, favour degree and effort level.

3.2.1 *Learning Motivation*

Psychologists' study found that motivation is the reason and strength which motivates people to do some activities. Learning motivation is the internal reason directly promotes students to learn, is a kind of conscious and positive state of mind the learners have in the school activities, is one of the most important non-intellectual factors affecting learning, is also one of the most dynamic factors.

To put it simply, learning motivation means the will students commit to learning activities; it shows in both objective and subjective aspects of learning activities. According to different degrees of awareness and understanding of learning motivation, this paper argues that learning motivation can be divided into perceptual motivation and rational motivation. Perceptual motivation comes from the interests of learning content and result, and refers to the part directly associated with learning activities. Rational motivation derives from the expectations of vision, and refers to the part associated with the social meaning of learning and individual's future.

3.2.2 Favor Degree

For postgraduate students, study tends to be dry and scientific and research work is full of all kinds of challenges. Along with the advancement of study and scientific research, the initial motivation would change more or less. The engagement of learning reflects on the other dimension, favour degree.

Favor degree can be interpreted as the mood and performance that students are fond of learning activity. Due to the continuity of the postgraduate learning activities, according to the performance at different stages of learning activities, favor degree can be analyzed from three stages: before learning, during learning and after learning. Favor degree represents the degree of desire and love to study before learning, self-perception of the knowledge and learning environment students are immersed during learning, the promotion degree of emotions, thoughts and knowledge after learning.

3.2.3 Effort Level

For postgraduate students' engagement in learning, the most important part should contain postgraduates actively participate in learning activities and make efforts to succeed. It is also the determining factor to the level of engagement in learning. In this paper, we named this part "effort level" as another dimension.

Effort level can be explained by the efforts students make to learning activities. It reflected in all psychological, physical and mental aspects, especially characterized by persistence in the face of hardships. The measure of effort level can develop from two aspects: positive degree of attitude and practice degree of efforts. Positive degree of attitude mainly refers to the mindset activity of postgraduate students engaged in learning activities. Practice degree of efforts mainly refers to postgraduate students' actual actions in learning activities.

To sum up, the structural dimensions of postgraduate students' engagement in learning as shown in figure 1.

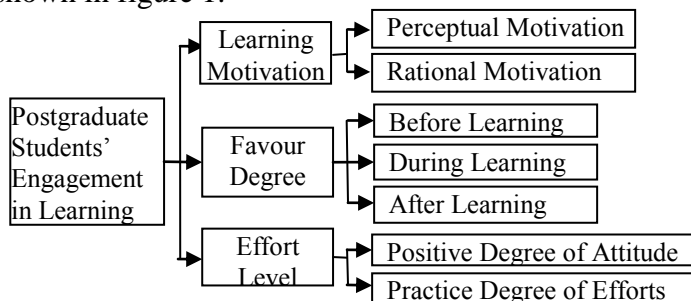


Figure1. The structural dimensions

3.3 The main influence aspects

Similar to employee engagement, postgraduate students' engagement in learning not only respects on their efforts on study, but also on recognition of the universities they chose. So when investigate engagement in learning, except three dimensions

(learning motivation, favour degree , effort level), we should also consider the two important aspects (the major and the university) affect the three dimensions.

On one hand, what kind of major even research direction postgraduate students choose have very important influence on their engagement in learning. A large number of researches of engagement theory show that if ones' job is or close to their favor, he will be of higher concentration, dedication and efforts. Similarly, if a postgraduate student selected the favorite major or research, both rational and perceptual motive are most strong.

On the other hand, the strength and prestige of postgraduate students choose also affects their engagement in learning a lot. Although one doesn't like his major, he may change his learning motivation, learning attitude and efforts level if he is in a reputable and substantial university. A good university can not only let you succeed in the study, but also make you better, have more abilities to cope with all sorts of difficulties and obstacles in the future and achieve success in life.

3.4 The measurement model

Postgraduate students' engagement in learning refers to the efforts level the postgraduate students make is conducive to their study or university. It can be explored through three main dimensions (learning motivation, favor degree and effort level), including seven small dimensions, and two aspects (the major and the university). Then we can get a matrix model of 3×2 , as shown in table 1.

After analyzing the existing research results about employee engagement measure indexes, we put forward 29 measurement questions based on the 3×2 matrix model and researches at home and abroad. These measurement questions are determined by systematic literature analysis, practical investigation and research of hundreds of mentors, postgraduate students, and postgraduate educator, and optimized with expert advice.

In this part, we mainly make references to the typical employee engagement scale, such as Schaufeli's (2003) UWES scale[4], Saks's (2006) engagement measurement scale[3], Gallup GWA's scale (also called Q12 questionnaire)[5], Hewitt's 3s engagement questionnaire, British professional research institute's (IES) engagement questionnaire [6], E3 scale of Development Dimensions International (DDI)[7] and the employee engagement questionnaire of Merit Systems Protection Board (MSPB)[8], etc.

In conclusion, the measurement model of postgraduate students' engagement in learning is on the basis of its three-dimensional structure, guided by the related measurement model of employee engagement, measured from two aspects of the major and university. The measurement model and indicators as shown in table 1.

Table1. The measurement model and indicators

Dimensions	Core Content	Indexes	
		To major	To university
Learning Motivation	Perceptual Motivation	1. I like the major I choose for postgraduate. 2. I am very fond of the learning mode of study and research.	1. The reason why I choose the university is its little enrollment pressure. 2. The good reputation of school will be a plus for my career.
	Rational Motivation	3. Postgraduate education will be able to make my overall quality improved significantly. 4. Postgraduate education can help me get a better job.	3. The reason why I choose this university is its rich resources is conducive to improve myself. 4. The university's learning atmosphere has a very positive influence on me.
Favour Degree	Before Learning	5. When get up in the morning, I want to study. 6. I just want to study if I have free time. 7. I'm full of enthusiasm in learning.	5. I feel proud of for my major. 6. My school has a good development prospect.
	During Learning	8. I am always immersed in my study. 9. I'm full of inspiration and energy in my study. 10. Although there may be some learning tension, I feel pleasure of body and soul.	7. I am proud of being a student of this university. 8. I have a clear understanding of my university's goals and objectives.
	After Learning	11. Learning makes me happy. 12. Learning would help to improve my ability effectively. 13. After learning, I still enjoy the pleasure of learning.	9. I will recommend my friends and family to study or work in my university. 10. My university can provide high-quality service for society.
Effort Level	Positive Degree of Attitude	14. I am always ready to learn.	11. I am willing to make all efforts to help the university complete the mission.
	Practice Degree of Efforts	15. I would focus on study selflessly. 16. If learning requires extra efforts, I still enjoy it.	12. I often put forward reasonable advices to the university (or institute). 13. I will try to learn new knowledge and skills to keep up with the development trends.

4 CONCLUSION

Postgraduates' management is a difficult and challenging task. To improve the quality of postgraduate education effectively, it is demanding postgraduate management workers should not only reform the innovation from outside management, but also pay attention to the study subject—engagement in learning. This paper starts with the view of engagement, considering postgraduates' main characteristics, and then constructs the structure of model and measurement model based on engagement theory. The biggest advantage is that the model can not only measure engagement in learning from different dimensions and levels, but also can reflect the differences between study and organization. It provides effective guidance for postgraduate education and management, and makes positive contribution to improving postgraduates' academic performance and management performance.

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