

## Research on the Adoption and Use Behavior of MOOC under the Theoretic Paradigm of Topic Use and Satisfaction

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**Abstract:** Based on the paradigm of media adoption, especially the use and Gratification Theory and the theory of emotional management, the study takes MOOC learning as a breakthrough point and reveals the psychological, motivational and emotional reasons behind the adoption and use of MOOC. In the discussion part, aiming at the "obstacles" in the adoption and use of MOOC, the safeguard mechanism is put forward based on the current situation, problems and domestic and foreign experience.

### 1. Introduction

In the Key Points of Educational Informatization Work in 2016, the Ministry of Education expressed its attitude to continue to build about 80 high-quality online open courses and encourage universities to share them widely; to guide universities to use online open courses to explore the reform of teaching methods such as flipping classroom and mixed teaching; and to promote China's high-quality online open Courses to the world, which shows that the state attaches great importance to the development of MOOC.

Research on MOOC teaching mode. MOOC is obviously different from the traditional teaching mode. It includes teachers, learning resources, teaching concepts, curriculum design, learning evaluation and other aspects. Through the analysis of the definition of hybrid learning, this paper discusses how to construct the hybrid teaching mode of MOOC, and explores the concrete implementation of the hybrid teaching mode supported by MOOC. First, MOOC is used to realize online basic knowledge learning, then MOOC learning effect is evaluated, new tasks are arranged, face-to-face teaching is implemented, and so on. (Zhang Huiyi, Xu Rongzhen, Sun Jie, & Jiang Yujie, 2017)

Research on MOOC copyright. The large-scale free and open resources of MOOC will inevitably bring copyright problems. Ye Wenfang combed the copyright issues involved in MOOC curriculum and learning activities, and the applicability of "reasonable use" in order to implement the copyright protection of MOOC.

Research on MOOC learners. In addition to MOOC itself and related theoretical research, there are also studies on the participants of MOOC. These studies mainly focus on the analysis of learners'group type, learning behavior, learning motivation and so on. According to the degree of learners'participation in the curriculum, Jiang Ling and others divided the learners into five types, i.e. the relaxer and the bystander. Liang Linmei explored the main factors affecting learners'persistence, such as learners' continuous time input, learners'knowledge and skills foundation in the early stage, learners' registration motivation, collaboration with others and the positive degree of participation in the forum.

However, there are few studies on MOOC learners. This leads to a topic worthy of discussion: What are the psychological factors affecting the adoption and use of MOOC? How to make relevant suggestions on the optimization of online courses by recognizing the influencing factors of MOOC

adoption and use behavior?

## **2. Theoretical framework**

### **2.1 The Theoretical Basis behind the Adoption and Use Behavior of MOOC: Use and Satisfaction Theory**

MOOC is a new form of online education curriculum relying on new media. Therefore, this study uses the classical paradigm of media adoption to analyze the influencing factors of the adoption and use of MOOC. Based on the theory of use and satisfaction, this paper puts forward the factors that affect the adoption and use of MOOC. U&G is useful in studying users' psychosocial needs, which attract and maintain users to specific media and content. The theory of usage and satisfaction holds that background characteristics will affect the use of media.

### **2.2 The influence of psychological factors on the adoption and use of MOOC**

According to the theory of use and satisfaction, psychological factors are the important reasons that drive people to use specific media. For online education, because there is a different teaching environment from the past, it may be more attractive for groups with certain psychological characteristics. This study focuses on loneliness as a psychological variable.

In this study, loneliness is defined as personality, called trait loneliness, which may affect the adoption and use of MOOC. Because of interpersonal interaction, lonely ICT will use impact (Papacharissi Rubin, 2000). Loneliness can lead to the spread of face-to-face relationships and unsatisfactory interpersonal needs (WeISS, 1973). As a kind of personality, loneliness is very important in the study of interpersonal relationship. Loneliness means "a person who has unpleasant feelings when a person's social network is flawed in some important aspects" (Perlman Peplau, 1981). Only personal social personality (Daly, 2002) affects media use (Perse Rubin, 1990) and the relationship between communication impacts (McKenna, Green, Gleason, 2002). Lonely people are often neglected in face-to-face communication. They are shy, introverted and refuse to communicate with others (Bell Daly. 1985; Jones, 1982; Peplau Perlman, 1982). Recent studies have shown that there is a certain relationship between loneliness and Internet interaction preference. Lonely people prefer social interaction networks to face-to-face interaction. They believe that network interaction poses fewer threats (Caplan, 2003) than face-to-face interaction. MOOC provides a communication space different from offline courses, which may be more attractive to groups with specific psychological characteristics. Therefore, this topic considers how psychological factors affect the adoption and use of MOOC.

### **2.3 The influence of emotional state on the adoption and use of MOOC**

In addition to motivation, emotion may also be an important influencing variable for individuals to use MOOC for online learning. Emotional management theory is a supplement to the theory of use and satisfaction. It emphasizes how emotion drives people to use the media and how emotion is regulated after use. In 1980, the theory of emotional management was put forward. Emotional management theory holds that individuals can stimulate the surrounding species, thereby minimizing their negative emotions or maximizing satisfaction. When this theory is applied to the selection of media, individuals can choose their own media contacts, further to the way you want to adjust their emotions. Based on this, they form some inherent media usage habits, and their behavior becomes applicable to the media for a long time (Zillman, 1985).

The media stimulus in the study was defined as more content, and a series of studies were carried out based on this deployment. Emotion management processes in different media were tested: TV, music (Knobloch, 2002) and web browser (MASTRO, 2002) found that various media content had an impact on the emotions of media users. Some researchers divide media content into four dimensions: the possibility of excitement, the attention of media users, the possibility of attracting media users, the affinity of content and the effectiveness of pleasure (Zillmann, 1988). Some researchers point out that besides the effect of media content on pleasure, media form also affects

dimensions. Media form includes three dimensions: the first dimension is reality: it refers to the real feelings of other people involved in communication and interaction; the second dimension is the extent of interactive media; the third dimension is synchronous information transmission. Between these people and the recipients (i.e., both parties share the same activities at the same time and focus on the same level of task) (Karin Schweizer, 2009). Inter-group comparison shows that the higher the score of media form, the better the impact on emotional management. Therefore, this study considers that emotional state has an impact on the adoption and use of MOOC.

### 3. Conclusion

This study holds that the theory of use and satisfaction is a reasonable paradigm to analyze the adoption and use of MOOC. It is necessary to use this theory as a paradigm to integrate multiple factors, namely, psychological factors and emotional state.

In conclusion, this study has the following two contributions:

(1) Summarizing the advanced experience of MOOC education in foreign countries, combining with the current situation of MOOC education in China; (2) Based on empirical research, this paper puts forward a safeguard mechanism to enhance the adoption and use of MOOC, which provides a feasible way to improve the effectiveness of online education.

Quantitative research methods can be added to further research in this field. For example, a multivariate regression model is established to examine the influencing factors of MOOC adoption and use behavior.

### References

- [1] Yangyuku. (2017). Empirical Study on the Influencing Factors of User Knowledge Sharing Behavior on MOOC Platform: Strategic Experience Module and TAM Model Based on Schmitt. *Journal of Information Resources Management* (4), 66-74.
- [2] Zhang Huiyi, Xu Rongzhen, Sun Jie, & Jiang Yujie. (2017). Research on Teaching Mode Construction Based on MOOC teaching platform. *China Education Informatization* (2), 32-34.
- [3] Wellman, B., et al., The Social affordances of the Internet for networked individualism. *Journal of Computer Mediated Communication*, 2003. 8 (3): P. 0-0.
- [4] Quan Haase, A., J. Cothrel, and B. Wellman, Instant messaging for collaboration: a case study of a high tech firm. *Journal of Computer Mediated Communication*, 2005. 10 (4): P. 00-00.
- [5] Cummings, J., J. Lee, and R. Kraut, Communication Technology and friendship during the transition from high school to college. *Computers, phones, and the Internet: Domesticating information technology*, 2006: P. 265-278.