Design Of Narcissistic In Mooc Gamification

Qiao Yan Fu 1,a, Jun He*1,b and Qing Qing Xu 1,c

¹Xiamen Academy of Arts & Design FuZhou University Xiamen, China No. 852, Ligong road, Jimei District, Xiamen, Fujian. Xiamen, Fujian Province, China ^awushen321@foxmail.com, ^bdr.hejun@qq.com, ^cmorimoriq@foxmail.com

Abstract

Gamification is one of the effective methods that the academic community and the industry believe can improve the effectiveness of MOOC. The game mechanism is applied to the curriculum design of MOOC to enhance user engagement, retention and loyalty. There are many different forms of game mechanics used in MOOC. Narcissism is a personality trait. It is characterized by expansive self-concept, seeking continuous attention and affirmation of others, and encourages various forms of self-improvement behavior in the game. It will cause violent fluctuations in the level of narcissism. The authors found a significant predictive effect of narcissism (selfselection effect) when examining the general usage behaviors in games, different types of games, unusual actions, and specific usage behaviors; various forms of game usage behavior It also strengthens the individual's level of narcissism. This paper mainly explores the manifestation of narcissism in the game, tries to explore the rationalization and improvement of MOOC gamification in behavioral cognition, and discusses the design mechanism.

Key words: Game-based Learning, Narcissism, Educational Innovation, MOOC(Massive Open Online Courses)

1.Gamification in MOOC

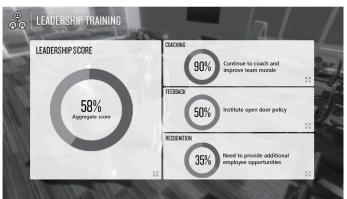
1.1 Gamification

After experiencing a rapid, drastic explosive growth in 2013, MOOC's new users have decreased year by year in recent years [1]. More importantly, an extremely high dropout rate (90-98%) made many insiders question whether the educational model of MOOC can indeed effectively promote learner's learning or it is just a propagation mode of information Datamation [2].

Teaching staff urgently hope to find a way to motivate students to learn. Currently, there are already lots of academic researches and practices based on the gamification design of MOOC [3]. So-called gamification means applying a game or elements, mechanism or idea of a game to some non-game situations or processes [4]. In fact, this concept dated back to the 1980s when Richard Bartle, a professor at the University of Essex in the UK and pioneer of the multiplayer online game, was the first to propose the term gamifying. Then, the word gamification was first used clearly in 2003 when English game developer Nick Pelling started to design gamification interface for electronic equipment, and the original meaning of this word as "turning a non-game thing (work) into a game" [5].

1.2 MOOC gamification application

The application of gamification to MOOC has been a significant approach to enhance the motivation to learn and lower dropout rate as well as make the learning process more lively and exciting to acquire a different experience in a school classroom [6]. However, from the perspective of the practical application, the gamification of MOOC mainly relies on adding some essential elements of game design, such as points, badge, and leaderboard (PBL [7]. Such a form of game elements is a manifestation of feedback and incentive mechanisms in gamification and is extensively used. For instance, Deloitte Digital adopted the mode of game-based learning in Deloitte Leadership Academy (online), and this large-scale MOOC enrolled over 200,000 Deloitte' employees and 50 clients and utilized gamification to make it easier for the students to accept new knowledge and make them feel pleasant in the learning process [8].



ource: Digital Center for Immersive Learning, Deloitte Consulting LLP.

raphic: Deloitte University Press | DUPress.com

Fig. 1 The Leaderboard and data visualization interface of Deloitte Leadership Academy

2. Narcissism and games

Narcissism describes narcissistic behavior or habit and can be considered as a personality or a phenomenon resulting from a collective response. Other than extreme situations, it is seen as an essential factor of a healthy mentality.

Moreover, narcissism is a multi-dimensional structure and divided into overt narcissism and covert narcissism [9]. Overt narcissism and covert narcissism share several characteristics in common, including high attention, need for the compliment, superiority, and lust for power. The level of narcissism is tightly interwoven with other mental feelings such as self-esteem, aggressiveness, desire and a sense of control, and these psychological senses of gain can satisfy human narcissism and influence human growth and development. A study [10] conducted by Professor Eun Joo Kim shows that there is a

significantly positive correlation between aggressive and game addiction that the more narcissistic and aggressive a student is, the more passion and engagement he or she will have in a game as well as the higher level of narcissism. Players can give free rein to their aggressiveness and competitiveness in a game and acquire a stronger sense of gain, achievement and control, (e.g., fig.2)which satisfies the human need for narcissism and hence deepen player's persistence in playing the game [11]. This article will focus on the mirror of this psychological need to innovatively design the gamification of MOOC for the purpose of boosting user engagement, enthusiasm, and persistence.



Fig. 2 Positive correlation between narcissism and other psychosensory factors

The study [12] conducted by Jin Kato shows that narcissism is an explicit factor which directly enhances game engagement and self-esteem is a factor indirectly influencing game engagement [13]. This process involves abovementioned mental activities and adopts stepwise multivariate regression analysis. Moreover, there is a significant correlation between player's self-control, narcissistic personality, disposition, attack together with interpersonal relationship and immersion in the online game (e.g., fig.3), and their interaction influences players' immersive experience in a game [14].

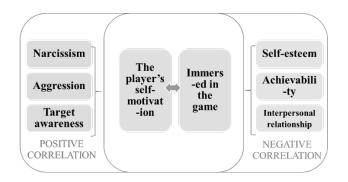


Fig. 3 The relationship between narcissism and game immersion

3. Narcissism-based Gamification Design in MOOC

3.1 MOOC gamification design process

With the development of MOOC gamification today, from extensive practices, scholars summed up many active and relatively mature model frameworks. The gamification design of MOOC is a process of continually iterating, improving, correcting and innovating. Popular theories in part three-support of theoretical framework are:

- (1). Addressing goal achievement;
- (2). Flow theory;
- (3). Persuasion Theory Social Influence;
- (4). Social Presence [15];

The most frequently cited and used theoretical support among them is flow theory. The viewpoint of Csíkszentmihályi is that flow state makes people unconsciously plunge into a game and boosts engagement in the game. To reach this status, a game designer designs a game as challenging yet achievable to keep the game interesting [16]. Through the study, the author found that many psychological phenomena in the four theories above are connected with players' narcissism development that players satisfy their narcissism of self-identification while acquiring a sense of achievement. This narcissism gives the player the confidence to get immersed in a challenge at the next stage. This article will improve the design of MOOC gamification from the perspective of narcissism by the abovementioned theoretical framework of the relationship between narcissism and immersion in the game.

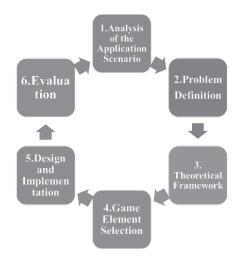


Fig. 4 MOOC gamification design process

3.2 The relationship between MOOC gamification and narcissism development

There are two directions to help students achieve narcissism development in MOOC students themselves and interact with other students. Gamification-based improvement in these two aspects is more than the use of gamification elements; slightly, it influences students' way of learning from inside to outside to improve learning efficiency. From the perspective of internal narcissism, the design of MOOC gamification enhances students' sense of achievement and accomplishment and confidence in finishing the course; from the angle of internal narcissism, it is necessary to develop benign competition, active social intercourse and moderate influence among students throughout the course, thus driving the engagement of students in MOOC.

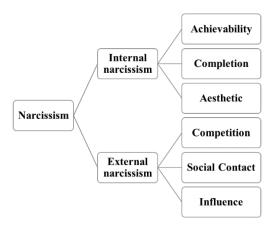


Fig. 5 The psychological feelings needed for the development of narcissism in MOOC gamification

Different from other forms of educational gamification, MOOC gamification relies on the construction and development of the MOOC platform to some extent. Moreover, MOOC gamification elements selected should meet differentiated needs of the curriculum and platform: the platform needs to offer a vigorous arena enabling successful development of external narcissism, and the courses should be able to satisfy students' inherent narcissism besides teaching. Different gamification elements will trigger different behaviors and results. For instance, in a contest, if a student is not adequately prepared in the learning process, he or she is highly likely to be unable to complete story missions or lose the motivation to learn due to the great disparity with other students in strength. A crucial point about gamification is how to judge whether the student has the ability to study further and this judgment method can be achieved by using feedback and hierarchy mechanisms in gamification elements.

Common gamification elements (e.g., fig.6) indicate that gamification factors driving students to learn are divided into individual factors and social factors [17], which are included in the same organizational framework with the abovementioned mental feelings needed by narcissism. Different applications of gamification can promote students' healthy level of narcissism in learning and guide students to keep on learning.

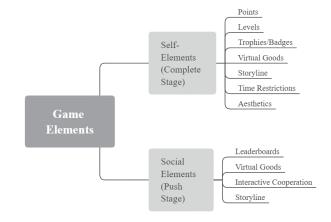


Fig. 6 Common gamification elements and classification

3.3 Optimum design model based on narcissism in MOOC gamification

Different MOOC platforms and curriculum systems can select suitable gamification elements to put into use according to students' background, performance and needs to reach different teaching objectives, instead of applying all gamification elements to all platforms and courses, which will result in excessive cache of make platform applications and make curriculum design prone to be restricted by modularization.

Optimization design model of the narcissism-based gamification of MOOC adopts individualized and customized module management (e.g., fig.7) focuses on satisfying the narcissistic needs of different groups to increase learning engagement and learning efficiency. Students may choose different gamification modules according to their needs, while MOOC platform and curriculum designers may offer students suggestions on course selection according to curriculum and big data analysis. Meanwhile, effective interaction between students can enliven the atmosphere for learning, increase the effectiveness of communication, achieve common growth, and initiate a virtuous cycle of MOOC gamification. Meeting narcissistic needs of students and student teams from different angles can prompt students to take a more active part and immerse themselves in MOOC.

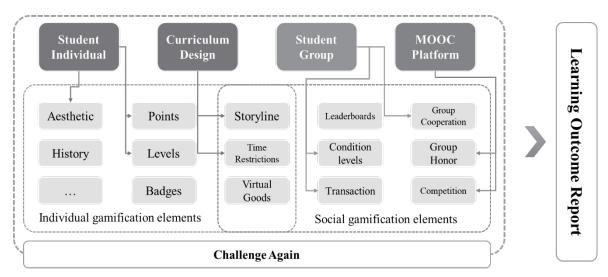


Fig.7 MOOC gamification based on narcissistic optimization design model structure

ISBN: 978-981-14-2064-1

Conclusion

For MOOC, the platform's framework and curriculum design influence student's learning process to a large extent, the reform of MOOC is not limited to gamification. Gamification is an emerging area where a wide range of knowledge are interwoven, and its development constantly absorbs the latest achievements of various disciplines. MOOC gamification should also draw on this development model and make use of different theoretical frameworks to do innovative design.

This article conducted a general analysis of narcissism, a personality trait, and utilize statistical data in related fields in an attempt to find a new method to improve the design. Different from common MOOC gamification models at present, the article not only introduced gamification elements from mechanism and operation but also deduced a suitable scheme from four dimensions-student, learner, teacher (curriculum design) and platform. Moreover, they chose suitable elements of gamification based on the abovementioned framework of narcissism development, and different learning modes provide more possibilities and approaches to achieve innovative education.

References

- [1] Caporarello L, et al., What motivate learners to keep attending a MOOC and take a new one: a research model proposal, E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education. Association for the Advancement of Computing in Education (AACE), 2018, pp.1449-1461.
- [2] Ho, A, et al., HarvardX and MITx: The first year of open online courses, fall 2012-summer 2013,2014.
- [3] Gené, O. B, et al., Gamification in MOOC: challenges, opportunities and proposals for advancing MOOC model. In Proceedings of the Second International Conference on Technological Ecosystems for Enhancing Multiculturality, 2014, October, pp. 215-220.
- [4] Antonaci, A, et al., Get Gamification of MOOC right!.

- International Journal of Serious Games, 2018, pp.61 78.
- [5] Deterding, S, et al., From Game Design Elements to Gamefulness: Defining 'Gamification, Proc. 2011 Annu. Conf. Ext. Abstr. Hum. factors Comput. 2011, pp.2425.
- [6] Borras-Gene, et al., New Challenges for the Motivation and Learning in Engineering Education Using Gamification in MOOC, Int. J. Eng. Educ., vol. 32, no. 1(B), 2016,pp,501–512.
- [7] Landers, R. N, et al., An empirical test of the theory of gamified learning: The effect of leaderboards on time-on-task and academic performance, Simul. Gaming, vol. 45, no. 6, 2014,pp. 769–785. https://doi.org/10.1177/1046878114563662
- [8] Brousell, L. How gamification reshapes corporate training. CIO. com. IDG Enterprise, 5, 2013.
- [9] Wink, P. *Two faces of narcissism*. Journal of personality and social psychology, 1991.
- [10] Locke, Kenneth D. Aggression, narcissism, self-esteem, and the attribution of desirable and humanizing traits to self versus others. Journal of Research in Personality 2009,pp. 99-102.
- [11] Kim, E. J., et al. The relationship between online game addiction and aggression, self-control and narcissistic personality traits. European Psychiatry 23.3,2008,pp,212-218.
- [12] Kato, Jin, and T. Igarashi. The effects of narcissism and selfesteem on immersion in social network games and massively multiplayer online role-playing games. Shinrigaku Kenkyu87.1 □ 2016.
- [13] Kato, Jin, and T. Igarashi. *The effects of narcissism and self-esteem on immersion in social network games and massively multiplayer online role-playing games*. Shinrigaku Kenkyu87.1

 □ 2016.
- [14] Eun Joo Kima, et al., The relationship between online game addiction and aggression, self-control and narcissistic personality traits European Psychiatry 23.3, 2008, pp. 212-218.
- [15] Antonaci A, et al., Get Gamification of MOOC right!, International Journal of Serious Games, 2018, pp. 61-78.
- [16] Csikszentmihalyi, M., Flow: the psychology of happiness. Rider, 1992.
- [17] Huang, W. H. Y., & Soman, D. Gamification of education. Research Report Series: Behavioural Economics in Action, Rotman School of Management, University of Toronto, 2013.