

The Dilemma of China's Basic Education and the Prominence of the Value of Educational Games

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Abstract: This paper focuses on the challenges faced by China's basic education in the era of digital entertainment, especially points out the harm of online game addiction to the healthy growth of teenagers, and reveals the universality of this problem by citing statistical data. With the prosperity of digital entertainment industry, the phenomenon of teenagers' excessive addiction to games is particularly prominent, especially in the context of epidemic situation, which is closely related to mental illness. Therefore, the society calls for the establishment and improvement of the anti-addiction mechanism and mental health intervention measures, and at the same time advocates the transformation of the game industry and develops functional games with educational significance. School education has negative functions in the process of adapting to social development, such as overemphasizing short-term results and regularization, which may lead to the suppression of students' personality and innovative spirit. Educators learn from the intrinsic attributes and values of games, and actively promote the development and application of educational games, with a view to enhancing students' intrinsic motivation through gamification learning, realizing entertaining and promoting their all-round physical and mental development.

Keywords: Game addiction, negative function of school education, educational games, entertaining.

1. Research Background

1.1. The impact of digital entertainment-game addiction

With the technological progress and social changes, entertainment elements have penetrated into all walks of life in various forms and ways, affecting people's daily life, education, social interaction and even work in all directions. At the same time, the entertainment industry itself is constantly innovating and expanding, and the diversified development trend is becoming more and more obvious. The sub-sectors including games, animation, film and television, music and e-sports are constantly being iteratively upgraded, forming a prosperous and dynamic market scene.

According to the summary of China Game Industry Report 2023 released in December 2023, by the end of 2023, the number of game users in China had reached 668 million, and the actual sales revenue for the whole year was 302.964 billion yuan. This series of data strongly confirmed the strong vitality and unlimited development potential of digital entertainment industry in China and the global market.

The rise of digital entertainment undoubtedly provides people, especially teenagers, with an unprecedented source of immersive experience and fun, which opens a world full of imagination and innovation. However, the double-edged sword effect of scientific and technological development is equally obvious in the field of digital entertainment. With the explosive growth and strong commercial attraction of this industry, online game products emerge one after another in the market, providing rich and convenient entertainment choices for teenagers.

Since the outbreak of the new crown epidemic, social activities around the world have been limited, which has led more teenagers to use video games as their main leisure way and social channel. This directly leads to the aggravation of teenagers' addiction to video games, and more and more

teenagers spend hours or even longer immersed in the virtual world every day. According to relevant statistics, a significant proportion of teenagers are addicted to video games. For example, about 12% of boys and 7% of girls may be addicted to games. The results of further research are even more severe. Some academic studies point out that the proportion of game obstacles is higher in a specific sample group.

In the field of education, faced with the impact of digital entertainment, educators are actively seeking coping strategies and deeply experiencing and studying digital entertainment forms such as network and electronic games. In recent years, many creative educational games have gradually entered the public eye. They not only represent the integration of traditional education and Internet technology in the new era, but also reflect the innovative combination between education and games. These games not only provide more diversified ways for learning, but also enable students to master knowledge in a relaxed and happy atmosphere, thus achieving the educational goal of entertaining.

1.2. The negative function of school education

In the late 1950s, American sociologist Merton put forward the analytical dimension of function and negative function in his book *Social Theory and Social Structure*. [1] Merton defines "function" as the observed consequences that help a system adapt and adjust, and these consequences are usually positive and constructive. On the contrary, he described "negative function" as those observed consequences that weaken the adaptability and adjustment ability of the system, which are usually negative and destructive. Merton's theoretical framework provides a powerful tool for analyzing social phenomena, especially in understanding how social systems adapt to environmental changes and how they have positive and negative effects when faced with internal and external pressures.

In contrast, although school education also emphasizes stimulating students' learning motivation and interest, it is

often difficult to achieve the expected results in the actual operation process. In the traditional teaching mode, mobilizing learning motivation and interest is often regarded as a strategic means to achieve teaching objectives and impart basic knowledge and skills. Within this framework, motivation activation and interest cultivation play more roles in assisting the teaching process, regulating the classroom atmosphere and improving short-term attention. Although this kind of practice can attract students' attention in a short time, the interest aroused mostly stays at the superficial level, which lacks persistence and cannot be effectively transformed into enthusiasm and internal driving force for learning itself. Therefore, we need to innovate educational concepts and methods to ensure that schools truly become a learning paradise that children love and cherish.

2. Highlighting the Value of Enjoyable Learning and Educational Games

2.1. The rise of fun-loving learning

After entering the 21st century, the deep integration of digital entertainment and education has become increasingly close. As two core activities in human spiritual life, the combination of education and entertainment is an important way to realize the beautiful educational concept of entertaining through education. Chinese scholars Zhiting Zhu, Peng Deng and other scholars took the lead in paying attention to and constructing the "theory of entertainment education" [2] It provides a solid theoretical support for the foundation and development of the theory of enjoyable learning in China.

In recent years, driven by the wave of innovative education such as flipping classrooms, the importance of Game-based learning has become increasingly prominent. Tracing back to the research origin of enjoyable learning, as early as 2003, James Paul Gee systematically expounded the influence of games on individual cognitive development for the first time. [3] Thus, the application of inquiry games in education has set off a worldwide upsurge. By 2011, the New Media Alliance (NMC) and the Educational Learning Innovation Organization (ELI) predicted in a research report sponsored

by Hewlett-Packard Company that in the next two to three years, enjoyable learning will become one of the hot spots in the research of emerging technologies in education. [3] Relevant empirical research shows that games, as a tool, can significantly improve students' learning participation and problem-solving ability, and are outstanding in improving students' emotional attitude and stimulating learning motivation. [3].

Fun learning, also known as game learning, is a teaching method that relies on educational games to learn. Compared with the simple pursuit of learning results and results, enjoyable learning pays more attention to the immersion and experience of the learning process, and strives to give consideration to the cultivation of both cognitive and emotional levels. Therefore, whether it is through game-based learning, game-based design, educational games, intelligent robots, interactive toys and other carriers, or even using emerging scientific and technological means such as augmented reality, virtual reality, Internet of Things and artificial intelligence to create a more innovative, immersive and interactive situational learning environment, it has become an indispensable research topic for enjoyable learning.

2.2. Games and related theories

Western scholars have diverse perspectives on the nature of games. With the development of the times, game theory has gone through three important stages: ancient primitive game theory, modern basic game theory and modern rich game theory. Early philosophers, such as Plato and Aristotle, had opinions about games, but they did not form a systematic game theory. In modern times, Kant, Schiller, Spencer and others have made a profound study of games from the fields of philosophy, aesthetics and physiology, and their theoretical views have had a far-reaching impact on the subsequent development of game theory. In the modern era, researchers have extensively explored the essential attributes and values of games from the fields of culture, biology, psychology, education and other disciplines, which has made the game theory develop more comprehensively and deeply. The summary is shown in the following table:

Table 1. Ancient Primitive Game Views

Theoretical name	representative figure	Main point
Game view	Plato Plato, 427-347 BC	In Plato's Laws, there is an activity that is described as a phenomenon with happiness as the core criterion. This activity has obvious characteristics of non-utility and non-truth-oriented, and its result will not bring negative effects. It is completely immersed in its own charm and attraction, and people often do not need to invest too much serious and in-depth thinking when participating in such activities. Such activities were defined as "games" by Plato.
	Aristotle, 384-322 BC	In Aristotle's Ethics of Nico Kyle, Aristotle believes that recreation is a necessary way to rest, which is to enable individuals to regain their energy after heavy practical activities, so as to better devote themselves to daily work. As an advanced form of recreation, games aim to provide deeper relaxation and pleasure, so that people can pursue and experience a happy life in a better state.

Table 2. Modern Basic Game Theory

Theoretical name	representative figure	Main point
Liberalism	Kant Immanuel Kant, 1724-1804	Linking games with art, the former aims at its own pleasant feelings, while the latter aims at seeking external value. Think of free art as a game, which is opposite to wage labor and is an activity with internal freedom and experience as the mainstay.
Theory of energy surplus	Schiller Friedrich Schiller, 1759-1805; Spencer Herbert Spencer, 1820-1903	Games and art are important ways for organisms to express themselves by using surplus energy while meeting their basic physiological needs. For higher animals, not all time and energy need to be devoted to direct survival activities. In leisure time, their organs tend to keep moving according to the laws of nature. This spontaneous behavior driven by surplus energy is essentially what we call a game phenomenon.

Table 3. Modern Rich Game Theory

Theoretical name	representative figure	Main point
Venting compensation theory	Floyd Sigmund Freud, 1856—1939	As a kind of virtual practice, game is essentially a way for human beings to satisfy their desires that may not be fully achieved in real life by means of virtual situations, which embodies the spiritual needs of human beings.
practice theory	Gulus Karl Groos, 1861—1946	Animals will play games that go beyond their material needs and exercise their abilities in these games. For human beings, games are not activities that lack goals. In fact, there is a close relationship between games and real life. Game is a product driven by biological intrinsic instinct, which provides an important platform for individuals to practice their skills and abilities.
Recreation and leisure theory	Huizinga Huiqinga Johan Huizinga, 1872- 1945	Game is an activity or leisure mode based on voluntary participation, which is carried out within a specific time and space framework. The rules of the game are accepted by the participants themselves and are absolutely binding. The game takes itself as its ultimate goal, accompanied by a tense and pleasant emotional experience, and shows a unique state of consciousness different from daily life.
Cognitive development game theory	Piaget Jean Piaget, 1896—1980	Game can be regarded as a form of thinking activity, and its core essence lies in the fact that the assimilation process surpasses the adaptation process to a certain extent. On the contrary, when assimilation is dominant, there is an adaptive relationship between the development degree of games and children's intelligence level, and there are different types of games in different stages of intelligence development.
Game existentialism	Gadamer Hans-Georg Gadamer, 1900-2002	The existing form of the game is similar to the natural law of motion. It does not depend entirely on the subjective spirit of human beings, but tends to show a pure self-expression characteristic. The essential connotation of the game is a passive expression with initiative. "The original meaning of the game lies in the integration of passivity and initiative".
Mastery theory	Eriksson Erik H Erikson, 1902 ~1994	Games not only have the function of relieving anxiety and realizing compensatory satisfaction of wishes, but also play a vital role in the process of individual self-development and are closely related to personality growth. The development of personality is the result of the interweaving influence of biological and social factors, and games provide an ideal platform for individuals to coordinate and integrate these two influences.

2.2.1. Game features and values

What kind of activity is the game? This is a basic and prerequisite problem that must be solved to understand the game. Although it is not easy to provide a universal and

recognized definition for the game, it is an effective method to reveal the characteristics of the game by analyzing a series of interrelated elements and refine its core essence on this basis. To sum up, the game embodies the following five key features.

Table 4. Summary Table of Game Features

Game characteristics	Related elaboration
Intrinsic drive	Children's motivation to participate in games comes from the deep heart, showing spontaneous and voluntary behavior. Games are not driven by physiological needs or external social pressure, but are dominated by internal motivation. The Dutch scholar Huiqingjia once profoundly pointed out that the real game is a voluntary behavior, and if it is bound by orders, it will lose its true nature, which can only be regarded as a forced imitation of the game at most.
Autonomous control right	In the process of playing games, children have a high degree of autonomy, and can choose game content, scene layout, partner combination and activity materials according to their own wishes, and freely decide how to use them and make rules. Children can flexibly adjust the game process and ensure that they are the masters of the game, so the game is essentially an activity form of children's self-decision and self-implementation.
Fictitious creativity	The content of the game has remarkable characteristics of fiction and imagination. In the game, children transcend the limitations of real time and space and construct a virtual world with poetic logic, in which anything is possible, and the space full of imagination is everywhere. Whether it is role-playing, situation simulation or creative reproduction of daily life, it fully embodies children's rich fantasy ability.
Emotional experience	The game atmosphere contains rich subjective feelings and psychological experiences, which are called game experiences. This kind of experience is a part of the core of the game spirit, and it is also one of the important signs to identify whether an activity is a game. Just as Sike Sen Mihelip uses the word "flow" to describe the emotional experience in the game, individuals in the game often devote themselves wholeheartedly and are full of inspiration, and the fun of immersion is the attractive charm of the game.
Process value	The purpose of the game is more concerned with the process itself than the actual output or ultimate goal. Games do not directly create social wealth, nor do they undertake specific social obligations. Their purpose is to pursue the pleasant experience and personal emotional satisfaction in a free state, rather than the utilitarian purpose. As Michele said, the game itself is a kind of free entertainment, and its significance lies in the happiness and feeling in the process.

3. Conclusion

The value of educational games in many aspects has been verified by many empirical studies, and the following will be summarized from several core dimensions.

First of all, educational games have played a significant role in stimulating learning motivation. Learning motivation is an important driving force to promote the learning process, covering three levels: internal needs, external incentives and self-regulation. [4]. The inherent entertainment in the game meets the internal demand, while the elements such as game currency, level and integral are external incentives, which have an impact through the player's self-regulation mechanism. Educational games can skillfully use game motivation to activate learning motivation and realize the harmony and unity between them. "Although the game is not happy to see failure, it allows failure; Encourage success, but do not guarantee immediate success." [5] Players don't have the absolute frustration of "game over" in the game, but they have the determination of "try again" when facing setbacks. Through its built-in incentive mechanism and tolerant treatment of failure, educational games have become the source of motivation for players to continue to challenge.

Secondly, educational games have shown positive effects in promoting cognitive development. As Piaget said, cognitive activities drive the occurrence of games, which in turn can strengthen cognitive activities. [6]. Educational games skillfully integrate knowledge content into the game situation, making "knowledge and technology are no longer the purpose of the game, but the way of the game". The process of the game is a cognitive exploration journey from ignorance to knowledge, and then to deepening understanding. In this process, participants' attention, observation, imagination, memory and thinking ability can be exercised

and developed. [6] Because of the relatively small psychological pressure and operational risk in the game, the individual's cognitive ability shows great flexibility and adaptability.

Furthermore, educational games also play a positive role in cultivating social skills. Smilansky pointed out that social role-playing games help individuals to master the essential attributes of social roles. [7]. Social communication in educational games simulates the interactive relationship between people in real life, which is conducive to cultivating individual social consciousness and communication skills, helping them overcome their egocentric tendency, getting familiar with social ethics, and improving their ability of competition and cooperation. In the virtual environment, players indirectly experience different social roles by playing game roles, thus avoiding the psychological blow that may be encountered in real life communication.

Finally, educational games can also effectively regulate individual inner feelings. The essential feature of the game is to provide a pleasant experience, which is different from the accumulated knowledge experience based on the objective world, but the subjective value exploration pointing to the spiritual world. [8] In the complicated social network of modern society, individuals often face emotional stress, which may hinder the development of individual sound personality. As an effective emotional control tool and a safe emotional expression space, educational games make individuals break away from the pressure of real environment temporarily by constructing virtual situations, and release real emotions by means of virtual worlds, thus achieving the effect of Emotional adjustment and psychological balance. At the same time, educational games can also play the role of improving players' emotional literacy, which can cultivate players' advanced emotional cognitive functions such as

aesthetic appreciation ability, sense of accomplishment experience, moral judgment and rational analysis. Through well-designed game immersion, educational games can help players find a suitable emotional interaction balance between real life and virtual experience while maintaining moderate appeal, and promote their positive progress in emotional management and personality growth.

Acknowledgment

This research: The research on the motivation stimulation mechanism of learning in educational games has been approved by Yunnan Normal University as a school level project, project number: YJSJJ23-B167.

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