



Exploring how to Understand Gaming Addiction in Adolescents from a Psychological Perspective

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Abstract. As an increasingly prominent social problem, game addiction has attracted widespread attention from all walks of life and has now become a problem that cannot be ignored in the process of youth growth. With the continuous development and popularization of Internet technology, game addiction has gradually become a global challenge. Many people are addicted to games and cannot extricate themselves. Prolonged addiction to games has brought about impacts on people in all aspects, from physical health to personal social skills, learning, and work performance. This work starts with the current situation of online games and their impact on adolescents and analyze the causes of adolescents' game addiction from a psychological perspective to explore how to understand adolescents' game addiction from a psychological perspective. Based on the available literature and the experience of actual survey data, it is found that in the process of preventing and correcting the addiction of online games among senior primary school students, the educational countermeasures of home-school cooperation and joint supervision and management are the most effective.

Keywords: online games; adolescents; game addiction; psychology.

1 Introduction

According to studies, the prevalence of Internet addiction among Chinese adolescents ranges from 10 to 15 percent [1]. A six-country survey in Asia showed that the bulk of problematic Internet use among adolescents ranges from 6 to 21 percent, and most studies in European and North American countries have found that the prevalence of online gaming disorders among adolescents ranges from 1 to 5 percent but is gradually increasing [2].

First, gaming addiction may be related to the development of the game. When developing a game, many game companies consider how to entice players to continue to participate in the game. This game design may contain elements that are popular with players, such as reward mechanisms, challenges that gradually increase in difficulty, and so on [3]. This means players must keep trying new challenges to stay interested in the game. In this process, the lack of self-regulation, curiosity in seeking stimulation, and the functioning of the internal sensory "factory" of the individual may lead players to become addicted to the game. Secondly, analyzing the psychological, social, and

social aspects of the game, the individual's situation is not the same, which is also one of the factors that lead to game addiction. As modern society shifts to more online socialization, people's face-to-face socialization may be affected. Especially for the teenage population still developing psychologically in real life, they may seek online gaming to find social interaction and identity [4]. However, relying solely on online gaming for social interaction may lead to gaming addiction as an individual's ability to socialize in real life deteriorates. Multiple factors contribute to gaming addiction, especially the psychological aspect that plays a direct role in gaming addiction. According to psychological research, while the Internet brings happiness and convenience to people, it also brings some negative impacts, and diseases such as teenage depression, anxiety, and attention deficit are associated with game addiction. Therefore, preventing game addiction requires careful consideration of several factors, including game production, social environment, and mental health. Game addiction is not only a prevalent social problem; below, this work will discuss it precisely through the following aspects [5].

1.1 The current situation of online games and their impact on adolescents

Definition and Status of Online Games.

Online games, referred to as "online games", are a new type of leisure and entertainment based on Internet computer applications with certain cultural connotations as the core [6]. Nowadays, with the development of the Internet, online games come in all shapes and sizes, and the online games running in China can be roughly divided into these categories: casual games, competitive battles, simulation and management, real-time strategy, and role-playing [7]. Various online games were beautiful to contemporary people, especially the youth group. So what are the reasons that modern online games attract the majority of the audience, and what makes the majority of young people invest a lot of money, energy, and pleasure and even the formation of a strong dependence on them? Undeniably, online games have a certain degree of stimulation. Seek stimulation is a kind of human instinctive need; the motivation of online games can make people forget, addicted, so that people's thinking gradually deviates from the track of reason [8].

2 The impact of online games on adolescents

2.1 Effects of online games on adolescents' cognitive development

Adolescents are at a developmental stage in their perceptions and cognition, and many aspects of gaming are subtly influencing their cognitive development. For example, younger players are generally more receptive to and enjoy participating in social solid games, as they are more interested in social interactions with peers or other players. In contrast, older players may be more inclined to opt for weakly social games, enjoying an independent playing and relaxing gaming experience. Strongly social games usually require payment of game subscription fees or purchase of virtual items, which may lead strongly social gamers to be more financially active in the game. They may be willing to purchase virtual currency, props, or expansion packs to improve the abilities and

appearance of their game characters [9]. Weak social gamers, on the other hand, may be more inclined to purchase expansions for the game proper or the single-player mode and are less likely to need to make additional in-game expenditures on virtual items. Therefore, the development of adolescents' money concepts is invariably influenced by gaming, in addition to all the other aspects of gaming's role in adolescents' perceptions [10].

2.2 The impact of online games on adolescents' social development

The following survey was conducted based on the social effects of online games on adolescents.

Research objectives: i. To investigate whether there are more significant differences between the groups of strong and weak social gamers; ii. To discuss what impact the medium (platform) of the first game for a player has on the player's subsequent gaming style and preferences, and iii. To discuss what impact the type of the first game for a player has on the player's subsequent gaming style and preferences [11].

Subjects: This study conducted in-depth interviews with fourteen players with a long history of gaming. Based on the board-structured interviews, data were collected and analyzed from the following four aspects: (1) 'basic personal information and personal view of gaming, (2) initial exposure to the gaming platform and the game itself, (3) self-perception, (4) personal gaming style (referring to the individual's reaction to the process of gaming); to explore the above three questions. The respondents in this study were selected because they have long gaming sessions and stable personal gaming preferences, are highly cooperative, and have similar social and living environments despite their age range, which is suitable for the sample collection of this study. Ten of the respondents were male, and four were female. Nine respondents were students. All three of the interviewees agreed that gaming has an impact on their personal social life to a greater or lesser extent.

Research Methods: Semi-structured in-depth interviews were conducted with the consent of the interviewees, who were interviewed individually for a period of time ranging from 30 to 90 minutes, and again on the basis of the consent of the interviewees, eleven of the interviewees were asked to play the game with two people each in order to observe their personal style (including in-game socialization, in-game decision-making style, and character playing habits). The purpose of playing the game together was to observe the interviewees' gaming styles from an objective point of view, in addition to subjective evaluations of the interviewees' gaming histories and selves.

The interview questions included the following three main areas: (1) basic personal information and personal views on gaming, (2) initial exposure to gaming platforms and the games themselves, and (3) self-perceptions. The synergistic gaming observation is to objectively examine the personal style.

The first phase of the interviews utilized

- (1) Gender
- (2) Age
- (3) Current city of living
- (4) Can you briefly describe your gaming history?

- (5) At what age did you first get into gaming?
- (6) Which game did you first encounter?
- (7) What was your first exposure to the medium of gaming?
- (8) Are there any games that have left a lasting impression on you?
- (9) What kind of game medium was used the most in the last three months?
- (10) Did you play more single-player or multiplayer games in the last three months?
- (11) Do you consider yourself an extrovert or an introvert?
- (12) How often do you socialize offline, and how often do you socialize online?
- (13) Do you feel more happy or tired, or something else, after attending these social events?
- (14) Whether gaming is a way for you to relax from your social life or a way to supplement socializing
- (15) Are your interactions with other players more active or passive
- (16) Do you feel that game design has impacted your social life, and if so, can you tell us about some specific impacts?

In total, the above 16 questions asked respondents to answer the questions based on their real experiences and opinions, with the first thoughts or feelings that come to their mind. The second phase of observation consisted of a series of non-deliberate open-ended questions and recording respondents' miscellaneous conversations about other players, the game itself, and the game's extension over 60-180 minutes to obtain more data on respondents' deeper thoughts about the role of gaming on themselves and their socialization [12].

Based on the above findings, it can be seen that there may be differences between players of strong social games (e.g., MMOs) and players of weakly social games (e.g., single-player games) in the following aspects: Lifestyle: Players of strong social games may be more inclined to spend more time socializing and interacting with other players online. They may participate in games more frequently, join gaming communities and teams, cooperate or compete, and build virtual social relationships with other players. In contrast, weakly social gamers may focus more on personal experiences and storylines within the game and prefer to complete game tasks alone. Strongly social gamers may develop good teamwork and social skills due to the need to collaborate or compete with other players. They often interact with players from different backgrounds, cultures, and nationalities, from which they gain opportunities for cross-cultural communication [13]. In contrast, weak social gamers focus more on individual game experiences and may pursue storylines and single-player adventures in their games.

Through the findings, it can be seen that the interactivity in games is deeply responsive to the social development of human beings regarding socialization, etc. For introverts who avoid social interaction, the fact that social interaction in games is becoming a part of normal social life can be seen as a good thing. Provides a safe social environment: For introverts, face-to-face social interaction can cause anxiety and discomfort. Game socialization provides a relatively safe and low-pressure environment to communicate with others in the virtual world, gradually improving social skills and self-confidence. It also expands social circles. Gaming socialization allows introverts to meet and interact with people from all over the world, breaking the limitations of ge-

ography and distance. They can find like-minded players, build meaningful relationships, and perhaps even make real-life friends outside the game. Games also provide some form of social interaction; game socialization can be a low-pressure and free form of socialization, where introverts can choose whether or not to engage in social interactions based on their comfort level. They can interact with other players through in-game chat, groups, or other social features without face-to-face interactions. However, it is important to note that game socialization does not completely replace real-life social interactions but serves as a supplement and extension. Finding the balance and engaging in real-life social activities at appropriate times and occasions is also important for introverts to grow and develop [14].

3 Analyzing the causes of adolescent gaming addiction from a psychological perspective

3.1 Emotional links from the company of the game

In the study of psychological motivation, the famous American psychologist Maslow's hierarchy of needs theory, physiological needs are the lowest of the needs. Physiological needs mainly meet people's survival needs, such as food, clothing, etc., and safety needs. After the physiological needs are satisfied, people need to meet the needs of modern society's physiological and safety needs. College students are in the stage of growth and development, in the stage of socialization; for college students, they desire social needs and respect needs, but for teenagers, their social needs and respect needs can not be fully satisfied. They have a lot of beautiful visions for society, but the reality is always cruel. After the social needs and respect needs of college students are not satisfied, they will seek other satisfactions [15].

Game as a highly interactive media form, the relationship between the player and the game character is affected by the conditioned form of expression. These factors together produce a personalized relationship between the two in the game. In the case of unequal power between the game designer and the player, the relationship between the player and the game character presents the characteristics of dynamic change. From a psychological point of view, network games have an emotional interactive function; network gamers can, through text, voice, and even video, carry on with the common hobby gamers from all over the world to communicate directly, widely make friends so as to achieve for the user to bring the function of psychological satisfaction. Accompaniment is not only physical presence. Without emotional flow, accompaniment is ineffective. The rhesus monkey experiment proved that love exists in three variables: touch, movement, and play. The core element in these three variables is the emotional link. Through touch, movement, and play, emotional responses and interactions are generated, accumulating into deep emotional links, providing positive stimulation of multiple sensory channels, such as touch, sight, and hearing, for young people.

3.2 Getting emotional value from the process of playing

According to the analysis of scientific research, first of all, the game has aesthetic effects. The current online games generally have exquisite pictures, smooth action effects, and realistic and shocking sound effects, which give people full aesthetic enjoyment. And secondly, the game is the carrier of virtual reality and hyper-reality. Modern online games are constructed as a virtual society consisting of virtual reality. Also, due to the characteristics of surrealism, gamers can fully obtain a kind of surreal experience that can't be experienced in real life. Secondly, modern online games are the carriers of virtual and surreal reality. Modern online games construct a virtual society composed of virtual reality, and because of their surreal characteristics, gamers can fully obtain a kind of surreal experience in real life. And there are many different kinds of online games with pluralism and diversity.

As media technology enters people's lives, and people in today's society sometimes don't know how to express and face the richness of changing emotions, they find video games a space where they can avoid negative emotions, where they don't have to worry about each other's emotions, and where they can vent their emotions without pressure. So, it is natural for video games to provide virtual companionship. Video games deflect emotional stress and relationship problems to some extent. However, this virtual online community, whose emotional links are unstable, fragmented, and randomized, and because it is detached from geographically related social elements, lacks the trust system, sense of security, and sense of belonging that are established in all-around interactions, and thus fails to provide positive emotional support and comprehensive psychological nourishment to adolescents in their long process of growth.

4 Conclusion

For the research of this topic, first of all, from the perspective of young people themselves, young people are in a critical period of physical and mental development, they should spend their time and energy on learning knowledge and growth of skills, they should recognize the harm of over-indulgence in online games, make a reasonable plan for accessing the Internet, cultivate good study habits and hobbies, and enhance the communication with their parents, teachers, and classmates. Standing in the perspective of online game development, the game role is the interface between the virtual world and the real world of players in online games; the relationship between players and game roles is an entry point to the relationship between people and the new technology and its impact on society has an important role, the government should establish a sound online game management system, to clarify the responsibilities of various departments in the supervision of online games, and to assume responsibility for the protection of the network security of young people. At the same time, the government should also strengthen the supervision and management of online game operators and business establishments, and schools should also strengthen the publicity and education on reasonable and scientific Internet access for young people so that a harmonious social environment can be created through the joint efforts of many parties.

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