



Master's Thesis of Public Policy

Regulating Online Games for Adolescent: Anti-Indulged System(防沉迷系統) in China

청소년을 위한 온라인 게임 규제: 중국의 방침미체계(防沉迷系統)

August 2022

Graduate School of Public Administration Seoul National University Public Policy Major

JIN PING

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Academic Advisor Min Gyo, Koo

Submitting a Master's Thesis of Public Policy

March 2022

Graduate School of Public Administration Seoul National University Public Policy Major

JIN PING

Confirming the Master's Thesis Written by JIN PING June 2022

ChairNa, Chongmin(Seal)ViceChairDostal, JörgMichael(Seal)ExaminerKoo, Min Gyo(Seal)

Abstract

At the beginning of the 21st century, online games in China began to develop, and the scale of the game industry and the number of users continued to rise. Online games have attracted a large number of teenage players, and some minors have become the main victims of "online game addiction". The government has introduced a series of online game youth protection policies, the most important of which is the online game anti-indulged system. This study takes the anti-indulged system as the research object and analyzes the evolution of the system with a focus on the interest group (game enterprises and parents of minors) politics moderated by the government bureaucracy.

Based on the development process of the anti-indulged system, this study divides it into three periods and discusses them separately under Wilson's regulatory politics model using content analysis and process tracing methods.

Formulation of the system and the pilot run period (2005-2007): The less organized parents group, with the help of the media, formed two opposing interest groups with the more organized game enterprises. And the government maintained a relatively neutral position to regulate the conflicts between game enterprises and parents, which gave rise to the interest-group politics model. In this model, the process of forming the regulatory policy of the anti-indulged system is highly transparent, and the policy is the result of a compromise between game enterprises and parents, with many loopholes.

Formal operation period (2007-2019): both the perceived costs and perceived benefits of regulation have gone through a process from concentrated to diffused to concentrated again. Wilson's political model applied to regulation first shifted from the interest-group politics model to the majoritarian politics model, where specific interest groups did not have strong incentives to support or oppose regulation, and the issue of online game anti-addiction was not put back on the political agenda, and the anti-indulged system was able to remain stable in this delicate balance. And then Wilson's political model applied to regulation shifted again from the majoritarian politics model to the interest-group politics model, and the stability maintained by the anti-indulged system in the balance of the majoritarian politics model could no longer be maintained and a change was ushered in.

Further strict regulation period (2019-2021): the anti-indulged system is enhanced and upgraded in 2019 and 2021, respectively. The government takes a strong role in this period and is no longer neutral; Wilson's regulatory politics model no longer applies. The organizing power of two interest groups, parents group, and game enterprises, has limited influence on

the formation of regulation, which is led by the government.

For a long time, the problem of minors being addicted to online games has not been well addressed. Unilaterally strengthening the anti-indulged system and imposing "one-size-fits-all" regulations on game enterprises are not only difficult to play a positive role but even lead to a series of counterproductive effects. The solution to the problem of online game addiction requires a more effective policy design that takes into account various aspects of society, family, and education.

Keyword : Online Game Addiction, Anti-Indulged System, Wilson's Regulatory Politics Model **Student Number :** 2020-28705

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Chapter 1. Introduction

1.1. Background

At the beginning of the 21st century, China' s online games started to develop, and the scale of the game industry and the number of users continued to rise. Online games have been popular in China for nearly 20 years, and it has grown and been criticized along the way. Online games have attracted a large number of teenage players, and due to the weak self-control of the teenage group, some online game developers and operators have implanted many unhealthy contents in the process of product development and operation for profit and adopted game mechanisms that are easy to make people addicted, resulting in many teenagers being addicted to games, wasting their studies and damaging their bodies and minds, which is not conducive to the healthy growth of teenagers. Parents, schools, and society are flooded with harsh criticism of online games, and calls for stronger regulation of online games have risen. Under such circumstances, the government has introduced a series of online game youth protection policies in response to social calls, to safeguard public interests, and to promote the healthy growth of youth and the orderly development of online games, the most important one of which is the Online Game Anti-Indulged System For Adolescent.

The Online Game Anti-Indulged System For Adolescent (hereinafter referred to as the anti-indulged system) is a technical tool proposed by the Chinese authorities in 2005 "to address the current situation of minors being addicted to online games." After a trial run in 2006, the system was officially launched in 2007. The main mechanism of the anti-indulged system is to persuade players to rationalize their game time and play healthily by warning them with pop-up windows and reducing their game earnings if they spend too much time online. Until 2019, the new policy proposes more stringent anti-indulged standards. The anti-indulged system has been greatly strengthened and the mechanism also has been transformed. In 2021, the latest policy was introduced, requiring all gaming companies to provide minors with one hour of service only on Fridays, Saturdays, Sundays, and legal holidays from 20:00 to 21:00 daily. Since then, China has entered the era of the strictest anti-indulged games.

The development of the anti-indulged system can be roughly divided into three periods: formulation period (2005-2007), the system development and trial run; implementation period (2007-2019), the system is officially put into use; and enhancement period (2019-2021), the system is enhanced and upgraded. As can be seen, after more than 10 years of being put into

use, the anti-indulged system has suddenly and greatly strengthened in recent years, strictly limiting minors' gaming time to 3 hours per week.

This study takes the anti-indulged system as the research object and analyzes the evolution of the system with a focus on the interest group (game enterprises and parents of minors) politics moderated by the government bureaucracy, to achieve a more comprehensive and profound understanding and knowledge of it. The anti-indulged system is the most important section of China's online game youth protection policy, and the study of it will also be beneficial to the understanding of related policies. It can also identify the problems of the policy and facilitate the adjustment and improvement of the relevant policy in the future.

1.2. Research Plan

The first chapter of this study is the introduction, which mainly explains the basic background and research object of the study, discusses the purpose and significance of the study; explains the research plan and research method.

Chapter 2 is the literature review and conceptual framework. Firstly, some concepts related to the anti-indulged system are defined, including the definition of online games and Internet addiction. Secondly, the development of the anti-indulged system is briefly outlined, and the mechanism of the system is analyzed and discussed. Thirdly, the literature review outlines the relevant research results of Chinese scholars on the anti-indulged system and online game youth protection policy in China. Fourthly, the most dominant theory used in the theoretical analysis part of this study, Wilson' s Regulatory Politics Model, is introduced. Finally, the conceptual framework of this study' s research is presented.

Chapter 3 to Chapter 5 are the main contents of this study, discussing each of the three periods (formulation period, implementation period, and enhancement period) of the anti-indulged system from its emergence to its development to date. And analyzes the evolution of the system with a focus on the interest group (game enterprises and parents of minors) politics moderated by the government bureaucracy, combined with Wilson 's regulatory politics model.

The last chapter is the conclusion. It summarizes the development of the anti-indulged system.

1.3. Overview of Research Methodology

This study mainly adopts the content analysis method and the process tracing method. Based on the main policies of youth online game regulation since 2000, this study analyzes the specific contents of the anti-indulged system and its mechanism and tracks the developmental changes of the system and its mechanism.

The process tracing approach is a research method that "explores causal mechanisms through a single case" and was proposed by Derek Beach and Rasmus Brun Pedersen, two Danish scholars, in 2013.¹ Process tracing has become popular in qualitative social science research. As a qualitative research method, process tracing attempts to open the "black box" of causality through specific, diachronic case studies, examining the causal mechanisms through which causes and effects are connected, thus forming a complete causal chain. Process tracing is good at explaining specific outcomes dynamically. Using process tracing to analyze causal mechanisms can help us understand the complexity of cause-and-effect relationships and help us understand important but rare events in the real world.

In terms of research purpose, there are two types of process tracing: process tracing with a general theory as the research purpose and process tracing with a specific outcome as the research purpose. They are consistent in revealing causal mechanisms through inference within cases; however, they have different focuses on general theories (causal hypotheses).² This study adopts the process tracing with a specific outcome as the purpose. No matter what kind of process tracing is done, researchers need to consider the four aspects of cause, effect, mechanism, and the situation in an integrated manner, not underestimating the specificity of the problem, not overestimating the generalizability of theoretical explanations, and looking for both the mechanism in front of them and the cause and effect elsewhere. The process tracing method should be guided by theories and variables to discover as many observable elements as possible, thus enhancing the validity of causal reasoning.³

This study uses the process tracing method to analyze the reasons for the development and changes of the anti-indulged system at each stage. Based on the existing literature and materials such as the "China Gaming Industry Report", the "National Research Report on Internet Usage of Minors", and social news, and combined with Wilson's regulatory politics model, the relationship between the interests of game enterprises and parents of minors is used as the independent variable to analyze its influence on the dependent variable of the anti-indulged system to explain the decision-making process of government policies related to the system.

¹ 熊栎天, 吴兵. 2015. 重庆国民政府外交决策的一般性机制及研究方法——基于过程追踪法的 理论构建模型. 《攀枝花学院学报》(6).

² 汪卫华. 2022. 拆解过程追踪. https://kns.cnki.net/kcms/detail/10.1393.D.20220509.1155.010.html

³ 曲博. 2010. 因果机制与过程追踪法. 《世界经济与政治》.

Chapter 2. Literature Review and Conceptual Framework

2.1. Online Games and Internet Addiction

Online games refer to individual multiplayer online games with sustainability aiming to achieve entertainment, leisure, communication, and virtual achievement with the Internet as the transmission medium, game operators' servers and users' computers as the processing terminals, and game client software as the information interaction window.

The classification of online games is generally classified mainly from two aspects of game carriers and game contents, and according to the different running platforms of games. Nowadays, there are three main running platforms for online games: high-end game consoles, pc online games, other terminals (such as mobile phones), etc.⁴ With the continuous improvement of smartphone performance, the mobile phone online game industry has grown explosively, and one of the representative games is "King of Glory" launched by Tencent in 2015, which covers multi-age players and can be said to be a household name mobile game.

The grading system is one of the main models for regulating online games, while the other is the censorship system. The grading system is that the regulator does not review online games before they are listed, but the government or the industry internally grades the games according to certain standards and according to the strict game content with different ages as the grading standard, and only allows players who meet the standard grade or above to register and purchase. The censorship system means that the government reviews the content of online games before they are listed for operation following the online game regulation policy, and if there is any illegal game content, they are not allowed to be listed for operation.⁵

The core content of the online game grading system is the game content grading system, which aims to protect the physical and mental health of minors and expose them to age-appropriate online games at different ages. At present, China does not have a well-established online game grading system, but mainly adopts a censorship system to regulate online games, which has many problems.

Internet addiction refers to the uncontrolled behavior of the urge to use the Internet without the effect of addictive substances, which is manifested by significant academic,

⁴ 贺司超. 2007. 中国网络游戏产业现状及政策分析. 北京: 北京邮电大学.

⁵ 戴秋辉. 2019. 网络游戏分级制度探讨. 广西: 广西大学.

occupational and social impairment following excessive Internet use.⁶ Duration is an important criterion for diagnosing Internet addiction disorder, and generally, the relevant behavior needs to last for at least 12 months to be diagnosed. But in China, in practice, the judgment of "Internet addiction" of minors is more dominated by the subjective view of parents.

Internationally, "Internet addiction" has not been regarded as a mental illness. Until May 2019, the World Health Organization adopted the eleventh revision of the International Classification of Diseases (ICD) at the 72nd World Health Assembly, "Gaming Disorder⁷" was officially classified as a mental and behavioral disorder under "disorders caused by addictive behaviors". This revised draft would have taken effect in January 2022. There are different opinions on the WHO's inclusion of gaming disorder as a mental illness. Some experts believe that the new ICD can help deepen people's scientific knowledge of gaming disorders, encourage the medical community to add new research directions and help hospitals provide more professional and targeted services for gaming addicts. Of course, some game companies expressed their disagreement that the evidence for including "gaming disorder" as a mental illness is not sufficient, and they hope that WHO will review it again.⁸

Regardless of whether it is officially listed as a mental illness, Internet addiction as a mental illness research object only refers to online gaming disorder, while Internet gambling, Internet pornography and excessive use of social media, and excessive browsing of Internet information have not yet entered the field of medical research. In China, for a long time, social cognition has been treating Internet addiction as a medical disease, regardless of whether it has a scientific basis. This has led to the formation of a huge Internet addiction cessation industry, and the widespread use of electroshock therapy in the Internet addiction cessation industry has caused serious problems and irreversible major physical and psychological damage to many minors.

Internet addiction disorder refers to the excessive use of the Internet to the point that it interferes with daily life. Internet addiction is a mental illness that is essentially bigotry of focusing too much on one part of daily life to the detriment of other parts. However, in China, Internet addiction is also a social disease. People will consider excessive online gaming a disease. But people hardly think that excessive learning that affects daily life is a disease, because few people are addicted to learning, and because people 's subconsciousness is influenced by the traditional Chinese culture of "pragmatism" and "utilitarianism", which

⁶国家卫生健康委员会. 2018. 《中国青少年健康教育核心信息及释义(2018版)》.

⁷ The term "addiction" is often used in non-medical settings, while in medicine it is often described as a "disorder".

⁸ 彭伶. 2020. 未成年人网络沉迷治理研究. 《预防青少年犯罪研究》(6).

generally believes that learning is very meaningful and one of the most important things in our life. On the contrary, playing online games is meaningless and often comes with a huge cost. In short, people prefer to devote their time to do things that are valuable and meaningful. However, the "valuable" and "meaningful" mentioned here are mainly the results of people's subjective judgment. With the progress of social ideas, people's evaluation of the Internet and online games gradually becomes objective and rational, and the subjective evaluation of playing online games as "meaningless" and "worthless" has been reduced but still exists.

In short, the problem of Internet addiction has arisen along with the development of Internet technology and the popularity of a series of network applications. Internet addiction is not only limited to online game addiction but also includes internet pornography addiction, information collection addiction, internet relationship addiction, internet gambling addiction, internet shopping addiction, etc. It is a very broad concept. And the problem of adolescents' addiction to online games is not only caused by the gameplay and attractiveness of the game itself but also closely related to the family environment and education situation. Therefore, it is obvious that relying on medical means alone cannot solve the universal problem of minors' addiction to the Internet.

2.2. Online Game Anti-Indulged System For Adolescent

The Chinese government' s regulation of online games first began in Internet cafes, and the rapid development of online games in the early 21st century drew the attention of various departments, which introduced a series of policies and regulations. From 2005 onwards, the issue of youth protection received more attention and the government began to rapidly introduce a series of measures to protect youths' healthy access to the Internet. One of the important initiatives was the development of the online game anti-indulged system for adolescent.

The Online Game Anti-Indulged System For Adolescent (hereinafter referred to as the anti-indulged system) is a technical tool proposed by the Chinese authorities in 2005 "to address the current situation of minors being addicted to online games."

The development of the online game anti-indulged system is briefly summarized as first proposed in 2005, it ran gradually, but with little regulation and little effect. It wasn' t until October 2019 that the system received its first enhanced upgrade.

In June 2005, the General Administration of Press and Publication organized relevant

departments, industry organizations, experts, educators, parents, etc. to jointly study and extensively solicit opinions, and proposed for the first time the "Online Game Anti-Indulged System For Adolescent", which uses technical means to limit the time minors spend playing online. It has also developed the "Online Game Anti-Indulged System Development Standard". In March 2006, the development of the system was completed and the trial run was started. To implement the Online Game Anti-Indulged System For Adolescent among minors more effectively, the General Administration of Press and Publication organized the relevant parties to formulate the supporting "Real Name Authentication Program for Online Game Anti-Indulged System".

According to the "Online Game Anti-Indulged System Development Standard" released in April 2007, the anti-indulged system developed and set up in online games defines minors' accumulated online game time⁹ within 3 hours as "healthy" game time; defines minors' accumulated online game time after 3 hours and then continued game time for 2 hours as "fatigue" game time; defines minors' accumulated online game time; defines minors' accumulated online game time; defines minors as "fatigue" game time; defines minors' accumulated online game time; defines minors' accumulated online game time; defines minors' accumulated online game time; defines minors as "fatigue" game time; defines minors' accumulated online game time over 5 hours as "unhealthy" game time. And the treatment of game revenue¹⁰ for different cumulative online time is as follows.

Accumulated Online TimeGame RevenueWithin 0-3 hoursNormalAfter 3 hours, within 5 hoursReduced to 50% of the normal valueMore than 5 hoursReduced to 0¹¹

Table 1. Game Revenue for Different Cumulative Online Time

In 2017, the Interim Measures for the Management of Online Games revised and released by the relevant ministries proposed that online game enterprises should require players to register in their real names using valid ID cards and save user registration information. In October 2019, the State Press and Publication Administration issued the "Notice on Preventing Minors from Being Addicted to Online Games", which provides more standardized guidelines for clarifying the anti-indulged standards of the game industry. It requires that online game enterprises shall not provide game services to minors in any form

⁹ After users are online, their continuous online time will be accumulated, called "accumulated online time"; after users are offline, their offline time will also be accumulated, called "accumulated offline time". If the user's cumulative offline time has reached 5 hours, the cumulative online time will be cleared to zero, and the online time will be accumulated again if the user comes online again.

 $^{^{10}}$ Game revenue = experience value gained in the game + virtual items gained in the game.

¹¹ The reduction of game revenue to 0 does not mean that the player is forced to go offline and cannot log in to the game. Due to their characteristics, some games cannot provide game services when the game revenue is reduced to 0, i.e. you can log in to the game but cannot play the game.

from 22:00 daily to 08:00 the next day. The length of game services provided to minors by online game enterprises shall not exceed a total of 3 hours per day on legal holidays and 1.5 hours per day at other times. It is also stipulated that online game enterprises may set a visitor experience mode of no more than 1 hour for their game services. In addition, there are also clear restrictions on the recharge and payment services provided by online games to minors of different age groups.

On August 30, 2021, the State Press and Publication Administration issued the Notice on Further Strict Management to Effectively Prevent Minors from Being Addicted to Online Games, which requires that the hours of providing online game services to minors be strictly limited, and that all online game enterprises may only provide services to minors for one hour from 20:00 to 21:00 daily on Fridays, Saturdays, Sundays and legal holidays. They shall not provide game services in any form (including visitor experience mode) to users who have not registered and logged in with their real names; strengthen supervision and inspection of the implementation of measures to prevent minors from being addicted to online games; and actively guide families, schools and other social parties to effectively assume guardianship responsibilities.

To sum up, the development of the anti-indulged system can be roughly divided into three periods: formulation period (2005-2007), the system development and trial run; implementation period (2007-2019), the system is officially put into use; and enhancement period (2019-2021), the system is enhanced and upgraded. The overall trend is that regulations are being strengthened.

At the early stage of application, the main mechanism of the anti-indulged system is to persuade players to rationalize their game time and play healthily by warning them with pop-up windows and reducing their game earnings if they spend too much time online. In the article "The Mechanism of Online Game Policy"¹² published by Shen Mingwei and Kong Qingfeng in 2005, they pointed out that the online game anti-indulged system adopts artificial "diminishing marginal returns" and scientifically controls the game time by punitively reducing the game revenue during unhealthy game time so that players can reasonably arrange their study, work, rest and entertainment time. As the interests of all parties are involved, the effect of this system will ultimately depend on the outcome of the game. Players, online game enterprises, and others will take different responses according to their interests, catering to or avoiding the anti-indulged system.

Shen and Kong divide game players into three categories based on targeted behaviors: deeply addicted players, shallowly addicted players, and ordinary players. Deeply addicted

¹² 沈明伟, 孔庆峰. 2005. 网络游戏政策的作用机制. 《山东师范大学学报(人文社会科学版)》 50(6).

players will adopt complete avoidance behavior and keep their original game time unchanged. For this category of players, the system' s restrictive effect is quite limited, because deeply addicted players will always find ways to play the game as long as they want, against all odds. The presence of the system does not reduce their playing time but rather increases their burden. Shallowly addicted players will adopt partial avoidance behaviors and reduce their game time to some extent. This category of players is the main subject of the system' s restrictions, and they will reduce their game time more or less under the system' s restrictions. Ordinary players have shorter game time, basically within the healthy game time, and their behavior is not affected by the system.

The shallowly addicted players, who are the subject of the system' s restrictions, can be further divided into three more specific categories based on targeted behavior: Class A shallowly addicted players will continue playing after the end of the healthy playtime, but due to reduced game revenue they will continue playing for a more or less reduced amount of time compared to before the system restriction. Game enterprises' revenue will be reduced to some extent. Class B shallowly addicted players will stop playing after the end of healthy playtime, but will not leave the Internet. They may visit websites, access forums or watch videos, etc. The revenue of game enterprises will be relatively reduced, but considering the two-way correlation between industries and the ripple effect of the online game industry, the activities of such players on the Internet after leaving the game may also bring some revenue to game enterprises to some extent. Class C shallowly addicted players will stop playing after the healthy game time and leave the Internet to end their Internet-related behaviors. There is no doubt that game enterprises will inevitably receive less revenue from such players.

For game enterprises, the revenue fluctuation brought by the system influence from players ' perspective is mainly dominated by shallowly addicted players, because the behavior of deeply addicted players and ordinary players is relatively more stable. Considering the behavior of three different types of shallowly addicted players, the revenue of game enterprises will be negatively affected in the short term. However, from the perspective of long-term revenue, the system has produced a certain positive impact. Otherwise, game companies will not actively respond to the policy and obey the management if there is no benefit at all. The most important positive influence of the system on the long-term revenue of game enterprises is to extend the product life cycle by suppressing the aesthetic fatigue and boredom brought by players' long-time playing. In this way, the profit cycle of enterprises can be extended, and the long-term revenue is not reduced much, and even increased to a certain extent.

However, with the strengthening of the regulation, the mechanism of the anti-indulged

system has also changed. If the mechanism of the system before was an artificial "diminishing marginal returns", after the policy strengthening, the system is more of a strict game time control, the details of which will be discussed in Chapter 5 of this study.

2.3. Literature Review

Regarding China's online game youth protection policy and the regulation of online games, academic research has covered the following aspects in summary.

First, research has been conducted from the perspective of minors' Internet addiction. In this regard, some scholars have conducted retrospective research on terms such as network addiction and online game disorder, analyzed them from the perspectives of law and sociology, pointed out the current network situation and the problems in the governance of minors' network addiction, and gave countermeasure suggestions that efforts should be made in both the implementation of key work and scene control to protect the healthy growth of youth.¹³ Other scholars sorted out the background of the online games' anti-indulged management and stressed the importance of joint participation of government, industry, society, school, and family.¹⁴

Second, the research is conducted on the grading system of online games and the regulation of the game industry. In the article "Exploring the grading system of online games"¹⁵, Dai Qiuhui conducts an all-round discussion on the regulation of online games and the grading system of online games in China, takes the current development dilemma of China's online game industry as the entry point, analyzes where the problems of China's online game regulation system lie, and explains the necessity of implementing and improving the grading of online games from both the practical and legal levels. Three different grading systems in Germany, the United States, and Europe are selected as references, and corresponding suggestions for improvement are given from the perspectives of legislation, audit, and enforcement for the current online game grading system in China. Some scholars also studied the government regulation of China's online game industry from 1996 to 2007, comparing it with the government regulation of China's animation industry and also with the government regulation of China's sonline game industry.¹⁶

Third, the research is conducted on the problems of government regulation and the

¹³ 彭伶. 2020. 未成年人网络沉迷治理研究. 《预防青少年犯罪研究》(6).

¹⁴ 王哲. 2020. 防止未成年人沉迷网络游戏管理工作的思考. 《产业论坛》.

¹⁵ 戴秋辉. 2019. 网络游戏分级制度探讨. 广西: 广西大学.

¹⁶ 彭桂芳. 2008. 我国网络游戏产业的政府规制研究(1996—2007). 湖北: 华中师范大学.

system dysfunction in regulation. Some scholars' studies point out that there are problems such as imperfect legal and regulatory systems, unclear regulatory authority, and unsound dynamic regulatory mechanisms in China's online game regulation.¹⁷ Other scholars have specifically studied the attribution problem of online game government regulation and divided China' s online game government regulation into four time periods in the past 30 years, arguing that the attribution problem of online game government regulation is complex and the government regulation policy should have a more scientific top-level design based on respecting practice.¹⁸ In the research of online game regulation, some scholars have studied the problem of system disorder in regulation, and believe that the problem is mainly manifested in three aspects: conflict of online game regulation objects, conflict of regulation subjects, and conflict of regulation purposes. It is necessary to take comprehensive measures from two perspectives, legal level, and social level, to improve legal regulation in a classified manner, and at the same time strengthen social regulation means such as industry self-regulation and technical supervision, to timely and effectively solve the problem of system dysfunction in online game regulation.¹⁹

Fourth, an in-depth study on the mechanism of the online game policy is conducted. Shen Mingwei and Kong Qingfeng, in their article "The mechanism of online game policy" ²⁰, conducted an in-depth discussion and research on the mechanism of the "online game anti-indulged system" based on the analysis of the behavior of relevant parties, and concluded that because the personal interests of all parties are involved, the effect of the policy measure will ultimately depend on the outcome of the game. The mechanism of the anti-indulged system will be further discussed in the second chapter of this study.

Fifth, the developmental changes of the youth online game regulatory policy in the past 10 years since 2000 are studied. Some scholars argue that China' s online game regulatory policy aimed at protecting youths has roughly gone through two stages from general regulation to special regulation. There are still problems of duplication of regulatory functions, insufficient effectiveness of regulation and protection for youth consumers, especially for underage online game behavior, and lagging technology and means of regulatory policy, which need to be improved through further research.²¹ Other scholars take the online game youth protection policy after 2000 as the research object and use research methods such as

¹⁷ 邹帆. 2019. 网络游戏政府监管问题研究. 《人民论坛》.

¹⁸ 陈党. 2016. 我国网络游戏政府监管的归口问题. 《湖南人文科技学院学报》33(4).

¹⁹ 李梦, 肖燕雄. 2018. 论我国网络游戏规制中的制度失调问题. 《广西大学学报(哲学社会科学版)》40(5).

²⁰ 沈明伟, 孔庆峰. 2005. 网络游戏政策的作用机制. 《山东师范大学学报(人文社会科学版)》 50(6).

²¹ 刘建银, 周铁. 2013. 我国青少年网络游戏监管政策的十年回顾与分析. 《重庆邮电大学学报 (社会科学版)》 25(1).

literature research methods and case studies to show the overall characteristics, achievements, and shortcomings of the policy in different periods. And conclude that, in general, China' s online game policy pays more and more attention to the protection of youth, especially the relevant policies since the newest time, and its policy measures become more and more flexible and pragmatic.²²

In summary, domestic research on online game youth protection policy in China has covered the aspects of underage addiction to the Internet, the classification system of online games and game industry regulation, the problems of government regulation and the institutional dysfunction in regulation, the mechanism of the online game regulation, and the development and changes of youth online game regulation policy in the past 10 years since 2000. There are few studies on the relevant policies and regulations in recent years, especially on the policy change of regulation strengthening in 2019 and the subsequent studies. And most of the studies focus on macro-level systems and policies, with less research on the anti-indulged system itself, and more research using the top-down approach. Shen Mingwei and Kong Qingfeng studied the mechanism of the anti-indulged system in 2005, but the mechanism has already changed due to recent policy changes.

In China, the government does have a lot of power, and many policies are made from the top down. However, an overview of the development of the anti-indulged system reveals that the formation of this game regulation is more like a bottom-up process, in which the game between two interest groups, game enterprises, and parents of minors, plays an important role. Given this, this study takes the anti-indulged system as the research object, adopts the bottom-up approach, and combines Wilson' s regulatory politics model to analyze the reasons for the evolution of this system at different stages. Although Wilson' s model is proposed by American scholars according to the national conditions of the United States and cannot be fully applied to China, the theory provides a way of thinking to analyze the regulation policy and is an inspiration to study the online game regulation policy in China.

2.4. Wilson's Regulatory Politics Model

In the 1980s, the American scholar James Wilson questioned the regulatory theory in economics, especially the universality of the regulatory capture theory. To remedy the deficiencies of economic theory, Wilson divided government regulation into four political

²² 陈党. 2016. 我国网络游戏青少年保护政策的变迁. 《淮北师范大学学报(哲学社会科学版)》 37(1).

models, based on the distribution of benefits that various interest groups could expect from government regulation and the costs they would need to invest.

		perceived benefits	
		widely narrowly diffused concentrated	
perceived costs	widely diffused	majoritarian politics	client politics
	narrowly concentrated	entrepreneurial politics	interest-group politics

Table 2. Wilson's Regulatory Politics Model²³

1) Majoritarian Politics

All or most of society expects benefits, and all or most of the costs are borne by all or most of society. Since no one can benefit or suffer, particularly from government regulation, there is no strong incentive for particular interest groups to support or oppose it.

Because of the collective action dilemma, the ability of policy issues to reach the political agenda is critical to the formation of regulation. The external factors that usually influence the formation of regulation are mainly the changes in the domestic and international environment and mainstream social thinking, while the internal factors are mainly the involvement of influential advocate politicians, public interest groups, and social media. It is necessary to make the public understand the need and justification for government regulation, but it is also necessary to deal with the conceptual barriers. Also, it is necessary to reach a consensus between the social elite and government officials on the necessity and justification of government regulation.

2) Client Politics

Client politics is a model in which the benefits of government regulation are concentrated in a few firms or individuals, while the costs are widely borne by a non-specific majority. The lure of higher revenues leads a few firms to organize quickly and exert pressure on the regulator through lobbying and other means. The majority of cost-bearers are less organized and less able to confront a small group of firms.

These regulations are economic regulations. Most of the regulations have the effect of inhibiting or reducing competition in the industry, and the established entrants can get higher

²³ 李秀峰. 2007. 威尔逊的规制政治理论述评. 《北京行政学院学报》(1).

returns. And the entry of new businesses is limited or costly. The lack of competition in industries often leads to a reduction in the competitiveness of the industry and the quality of services, thus causing widespread public discontent.

The beneficiaries of the regulation are highly organized and can exert a strong influence on the policy decisions and implementation of the regulatory body. If the effectiveness of the regulation is challenged, the beneficiaries of the regulation often cite the public interest as a reason for maintaining the status quo. In short, the beneficiaries of regulation will always try to maintain the status quo of government regulation to protect their vested interests. In the process of regulation formation, there is often lobbying and backroom deals, and the beneficiary groups and regulatory agencies tend to reduce the transparency of the regulation process to a minimum.

Because of the powerful financial and political influence of special interest groups, legislators and regulatory agencies are often captured by special interest groups, while the general public is forced to accept unnecessary sacrifices. Without the efforts of public interest groups in the process of public gaming, there is a high risk that the government will be fully captured by special interest groups.

3) Entrepreneurial Politics

The costs of regulation are borne by a small number of firms, while the beneficiaries are very broad. The enterprises that bear the costs are more organized and have more political influence, while the beneficiary groups have difficulty confronting the conglomerates because of the collective action dilemma.

Most are social regulations, and they generally make companies take on more social responsibility by increasing their burden (actually, their cost). The regulatory agencies (environmental protection, welfare, transportation, and resource management agencies, etc.) responsible for implementing the regulation are in an adversarial relationship with the regulated industry, so the regulatory agencies need not only staff and financial independence and security but also the attention and support of politicians and the general public.

The role of the third sector outside of government and business is very important in the formation of government regulation as described above. The third sector is dominated by entrepreneurial politicians who come from different fields, such as Congress, the media, various civic associations, and academia.

Changes in power, crises, and accidents are often important opportunities for the formation of such regulations. Accidents create public resentment against a particular company, which provides strong support for government regulation. These are important reasons why the more organized groups of firms with imminent interest loss are still unable to prevent the formation of government regulations.

4) Interest-Group Politics

Interest group politics is a model in which the costs and benefits of government regulation are concentrated in a few groups and the interests involved are large. In this case, both opposing sides will use their political influence to fight to ensure that their interests are maximized.

Since the two opposing sides are evenly matched and both have a certain degree of political influence, the government usually takes a neutral position to regulate the conflict between the two sides. In this case, the policy is often the result of a compromise between the two sides, but the possibility that the values of political leaders or government officials have absolute influence is not excluded. Both opposing parties want to strengthen their influence by cooperating with third parties and gaining social sympathy through the media so that the process of regulation formation is more transparent. And since ordinary people who have a stake in such regulation are caught in the dilemma of collective action, their interests are sometimes not paid attention to and protected as necessary.

In conclusion, since different regulatory politics involve different actors and lead to different outcomes, they tend to exhibit different characteristics. This depends largely on the distribution of costs and benefits that will be generated by the regulatory policy. In client and interest-group politics, economic interests play a significant or even decisive role in the outcome of regulatory policies. In entrepreneurial politics, the influence of economic interests is less pronounced, while in majoritarian politics, the influence of the material interests of the parties involved may be more pronounced, but at least not decisive.

Wilson' s regulatory politics model has limitations as well. First, government regulation is not static, but a dynamic process that may lead to a shift in political paradigm as internal and external variables change. Second, ambiguity. The division of the distribution of costs and benefits is relative and does not provide a certain standard. Third, equating the regulator with the regulating executive is likely to overlook the influence of the legislature and the judiciary in the regulatory process.

2.5. Conceptual Framework

According to Wilson' s regulatory politics theory, government regulation can be divided into four political models based on the distribution of benefits that various interest groups can obtain from the regulation and the costs they need to invest. The cost of developing and implementing the anti-indulged system as government regulation of online games is mainly concentrated on the game enterprises, and its benefit is mainly concentrated on the parents of minors.

To seek a more specific analysis, this study focuses its perspective on two interest groups, parents group, and game enterprises, and considers the extent to which the perceived benefits and perceived costs of regulation are dispersed or concentrated in these two specific groups as independent variables, and analyzes their impact on the dependent variable of anti-indulged systems in conjunction with Wilson's regulatory politics theory.

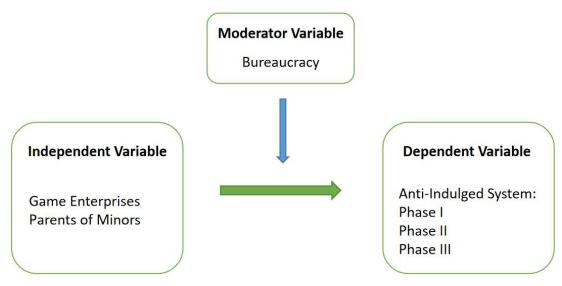


Figure 1. Conceptual Framework

Chapter 3. Formulation Period (2005-2007)

3.1. Game Enterprises: Rapid Development with Policy Support

At the beginning of the 21st century, Chinese online games started and grew based on the original game industry, and made great progress. The scale of the industry has been increasing year by year, and some powerful online game companies have been born, creating a series of classic online game works and gathering a large number of online game users.

In 2001, the actual sales revenue of China' s game market was about RMB 500 million, among which the online game industry exceeded the single-player game industry for the first time with RMB 310 million.²⁴ By 2005, the size of China' s online game market was estimated at RMB 7-8 billion, with a growth rate of 108.33%. The users of online games are about 30 million, including more than 20 million online users and 10 million paid users, with an average growth rate of more than 30%. There are nearly 300 online game enterprises, including about 150 game developers, ranking second in the world after South Korea, and the number of games in the market is about 200.²⁵ In January 2005, the first annual conference of the Chinese game industry was held. It can be said that China's online game development has experienced a period of rapid development in the five years. And the first annual conference also showed the high organization of Chinese game enterprises.

The main line of the online game industry chain is online game developers, online game operators, sales channels, telecommunication operators, and users. Among them, network operators directly face upstream developers and downstream sales channels and users, which is the core of the value system of the whole industry chain. The secondary lines of the online game industry chain involve the IT industry, manufacturing industry, media industry, and exhibition industry. The rich industry chain is interrelated, and with the development of online games, the related industries get huge commercial space, especially the telecommunication and IT industry.²⁶

Although the game industry itself belongs to the interactive digital content industry as well as the leisure industry, it is at the same time a comprehensive body spanning many fields such as the Internet, computer, software, and consumer electronics. The penetration of the

²⁴ 中国出版工作者协会游戏工作委员会. 2004年度中国游戏产业报告.

²⁵ 北京大学文化产业研究所,国家文化产业创新与发展研究基地.2006.《中国文化产业(2006) 年度发展报告》.湖南人民出版社.第454页.

²⁶ 中国出版工作者协会游戏工作委员会. 2004年度中国游戏产业报告.

game industry is huge and affects many related industries: the telecommunication industry (fixed-line service operators and mobile operators), information industry (hardware, software, telecom ISP providers), commerce (channel sellers), the media industry (advertising, newspaper, TV, online media), the traditional publishing industry, manufacturing industry (ornament and toy enterprises), exhibition industry (E3, GAMESHOW).

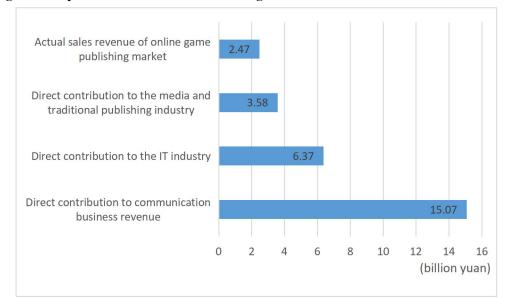


Figure 2. Impact and contribution of online games to related industries in China in 2004

Data source: 2004 China Game Industry Report

The rapid development of online games in China at the beginning of the 21st century could not be separated from the objective background of China' s reform and opening up, economic development, technological progress, and market expansion at that time, and also could not be separated from the help of China' s online game support policies. 2000-2004, the online game industry broke through, and the policies made tentative support with relatively single measures. In this period, the policy began to explore the support for the development of the national game industry, during which China' s online game authorities promulgated eight policies related to the support for the national online game industry. In 2003, online game was officially included in the national 863 program²⁷.

From 2005-2008, the game industry grew at a high speed, and the policy increased the support and adopted various measures to promote the development of China' s online game industry, including tax relief, relaxing capital access, increasing the construction of industrial support system, implementing the national game quality project, developing peripheral

²⁷ National High-tech R&D Program (863 Program). China's major science and technology programs in the reform and opening-up era.

industries, strengthening and improving export work, accelerating structural adjustment, strengthening industrial policy research, etc. The main reason for China to increase its support for the online game industry and introduce relevant favorable policies in this period is the national strategy of supporting the great development of the cultural industry. In 2005, the Fifth Plenary Session of the 16th Central Committee emphasized the need to deepen the reform of the cultural system and actively develop cultural industries; in the 11th Five-Year Plan of National Economic and Social Development, it was emphasized that the development of national cultural industry should be promoted. In 2007, the 17th National Congress proposed to vigorously develop cultural industries and stimulate the vitality of cultural creation of the whole nation. Under the policy environment of supporting the development of the cultural industry, the online game industry has become the object of policy support and development.

It is under the background of such policy support that China's game industry has developed rapidly. However, at the same time, the imperfection or lack of relevant regulation has led to the emergence of many social problems, such as the chaos of Internet cafes and the addiction of young people to online games.

3.2. Parents' Concern: Adolescent Online Game Addiction

Online games attract a large number of teenage players, and because of the weak self-control of the teenage group, some online game developers and operators implant many unhealthy contents in the process of product development and operation for profit and adopt game mechanics that are easily addictive, leading to many teenagers being addicted to games, wasting their studies and being physically and mentally damaged, which is not conducive to the healthy growth of teenagers. Internet-addicted teenagers often drop out of school, beat up their parents, and steal property. One of the most sensational incidents was in 2004, when a 13-year-old boy in Tianjin committed suicide by jumping off a building after 36 hours of continuous Internet surfing in an Internet cafe, and was later identified as suffering from severe "Internet Addiction Disorder(IAD)". At that time, the concept of "Internet addiction" or "online game addiction" did not have a very scientific and precise explanation. In China, for a long time, social perception has regarded Internet addiction is not only limited to online game addiction but also includes Internet pornography addiction, information collection addiction, Internet relationship addiction, Internet gambling addiction, Internet shopping

addiction, etc. It is a very broad concept. However, at that time, because the main purpose of teenagers going online was to entertain and play online games, coupled with parents ' stereotypes about online games, it led to the spearhead of online addiction pointing directly at online games.

There is no individual survey report on the use of online games by teenagers. Online games are one of the important components of Internet content, and the online game usage of teenagers can be understood based on the survey report on the Internet usage of Chinese minors. And a more objective understanding of the phenomenon of online game addiction in minors can also be obtained.

According to the 2006 Survey Report on Internet Usage of Chinese Minors, the use of the Internet by minors is already a very common phenomenon, with nearly 85% of minors having used the Internet, and the popularity of the Internet is very high. In terms of the frequency of Internet access, the majority of minors go online once a week or less, accounting for 67.03% of the total number. Among them, more people go online once a week or so, with an effective percentage of 39.10%. The number of people who go online every day accounts for 10.95%.

Several Once in Once in Once Once Once Once half a half a every few Not sure times a day a week a month a day week month months 9.7 3.6 7.35 16.98 39.1 5.44 8.19 9.65

Table 3. Frequency of Internet use among minors (%)

Data source: 2006 Survey Report on Internet Usage of Chinese Minors

In terms of the length of time, the surveyed minors spent online, most of them used the Internet for a relatively normal amount of time, with the majority of them spending about 2 hours or less online each time on average, reaching 70.85% of the total number. Among the respondents, 10.89% of them spent more than 4 hours online each time, and 4.53% of them spent more than 5 hours online. Even though this is a small percentage of people, it is very likely that they have become or are slowly becoming Internet addicts²⁸, which should not be ignored.

 $^{^{28}}$ The "Internet addict" here is not a judgment in the medical sense, but according to the development standard of the anti-indulged system released in 2007, the accumulated game time within 3 hours is healthy, and more than 5 hours is unhealthy game time, which means there is a risk of Internet addiction.

Less than half an hour	Half an hour	1 hour	2 hours	3 hours	4 hours	5 hours and above	Not sure
6.44	11.44	28.22	24.75	11.02	6.36	4.53	7.25

Table 4. Average length of time minors use the Internet per visit (%)

Data source: 2006 Survey Report on Internet Usage of Chinese Minors

In terms of where minors go online, home is the main place, followed by Internet cafes. The percentage of those who usually surf the Internet mainly at home is 46.78%; the percentage of those who usually surf the Internet mainly at Internet cafes is 23.79%.

From the survey, minors surf the Internet for a variety of purposes, mainly divided into four kinds of practical, entertainment, communication, and information seeking. Among them, the largest proportion is for entertainment and recreation. In addition, on the whole, minors' choices for the Internet are more diversified, among which the entertainment function, communication function, search function, and information supply function are more popular among minors. Recreational activities such as online games and music continue to attract minors who are exposed to it with their unique ways and rich content, and entertainment functions like listening to and downloading online music (68.28%) and playing online games (62.85%) are greatly respected by minors.

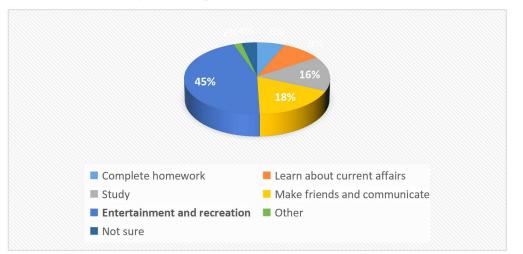


Figure 3. Purpose of Internet access for minors (%)

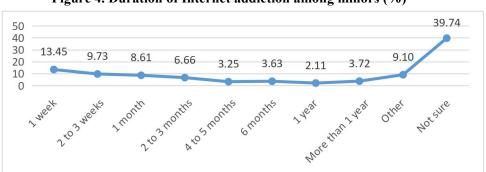
Data source: 2006 Survey Report on Internet Usage of Chinese Minors

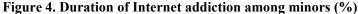
The survey shows that more than 60% of minors have played online games, and when asked whether they have the desire to play if they haven't played before, 70% of them don't deny that they want to play online games, and more than 30% of them want to play more or

want to play very much. This shows that online games have great temptation and attraction for minors, which is also in line with their psychological characteristics of liking novelty and accepting new things easily.

In terms of the frequency of minors playing online games, 7.95% of them play online games every day, including 3.23% of them several times a day. For most minors, online games are not yet a regular choice, but it cannot be ignored that a small proportion of minors play online games many times a day and are too indulged in them. In terms of the average length of online games played by minors, more minors play online games for less than two hours each time, accounting for 62.27% of the total, which shows that most minors still control the time of playing online games to a certain degree. However, there are still a small number of minors who are addicted to online games, with 5.77% playing online games for more than four hours each time, which means that a small number of minors may have become or are becoming addicted to online games.

In the 2006 survey report on the Internet usage of Chinese minors, the problem of Internet addiction was also examined and analyzed as an important part to find out minors' attitudes and opinions on the problem and situation of "Internet addiction" which was a social concern at that time. The results of the interviews revealed that minors did not think that Internet addiction had become a big problem among minors, and in their opinion, Internet addiction among minors was not as serious as the media had made it out to be. In the survey on the degree of Internet dependence among minors, it was found that most minors (74.90%) said that they had not experienced the phenomenon of being addicted to the Internet and having difficulty in self-control, but some minors did think they had, accounting for 15.66% of the total. Among the minors who have experienced such a situation, the length varies, with 13.45% of them having such a state for one week, the largest percentage, followed by those who lasted two to three weeks, accounting for 9.73%, then those who lasted one month, accounting for 8.61%, and 5.83% of those who had such a situation for six months or more.





Data source: 2006 Survey Report on Internet Usage of Chinese Minors

In summary, we can conclude a range of values related to the online game addiction behavior of teenagers - 5% to 10%. The number of people who go online every day is 10.95%, those who go online for more than four hours each time reaches 10.89%, those who play online games every day is 7.95%, and those who play online games for more than four hours each time is 5.77%, and most of these values fall between 5% and 10%. Of course, it is not possible to simply state through the above data how many percent of teenagers have online game addiction problems, because the issue of how to determine whether there is online game addiction is complicated, and there is no set of scientific definitions and explanation method at least at that time. Therefore, many of the so-called problems of youth online game addiction are subjective judgments of parents and teachers. But these data can reflect the objective actual situation of teenagers using the Internet and playing online games to a certain extent, and we can say that about 5% to 10% of teenagers have the problem of excessive Internet access and excessive playing of online games, and the real Internet-addicted teenagers should be less than this percentage.

Now the question goes back to whether the problem of teenagers being addicted to online games is serious or not. Maybe in statistics, 5% is not a big percentage, but in real life, we can't ignore the fact that China is a super population country. In 2006, the total population of China is 1.3 billion, among which the proportion of children (under 18 years old) is 19.8%. That is to say, hundreds of thousands of teenagers have the problem of excessive Internet access and excessive playing of online games, which is a very large number. Wen Jiabao²⁹ once said that in China, a very small problem, multiplied by 1.3 billion, will become a big problem; a very large total, divided by 1.3 billion, will become a small number. So in China, the huge population base determines that any seemingly insignificant social problem will become a large social problem involving hundreds of thousands of people, and this is also the case with the problem of young people being addicted to online games. In a word, it is not a very serious problem only in terms of proportion, but in terms of the actual total number, it matters a lot.

In addition, the negative news about "Internet-addicted teenagers" reported by various media and some related social news has intensified the public perception of the seriousness of the online game addiction problem among teenagers. However, in reality, the actual situation is exaggerated due to the "survivorship bias" of news reports. The "survivorship bias³⁰"

²⁹ Wen Jiabao, Premier of the People's Republic of China (2008.03-2013.03), proposed the "simple but complex multiplication and division" in an interview with the Washington Post in Beijing in November 2003.

³⁰ MCDREEAMIE-MUSINGS. Bullet Holes & Bias: The Story of Abraham Wald.

refers to the fact that the non-survivors are no longer able to speak out, and people only see the results after some kind of screening but do not realize the screening process, and therefore ignore the key information that has been screened out. Most of the media will only report negative news about teenagers' online game addiction, and will not report on the teenage population that makes up the majority of those who reasonably play online games. This leads to the fact that all news about teenagers playing online games is about game addiction, which makes the public, especially parents who pay attention to such news, think that the problem of "Internet-addicted teenagers" is very common and serious. But in reality, whether the problem is serious or not, it has been understood exaggeratedly. As mentioned in the survey report, the interviews found that in minors' opinion, Internet addiction among minors is not as serious as the media makes it out to be.

The two generations have different opinions on which approach can effectively solve the problem of "Internet addiction" at its root. A significant proportion of minors choose to eliminate the negative effects of "Internet addiction" by self-discipline from the perspective of internal causes and consider it very important to improve their own ideological and cultural quality, with an effective percentage of 34.85%. A total of 21.34% of people think that the management and supervision of the Internet should be further strengthened, and 12.05% of people say that the problem should be solved by separating the Internet for adults and minors. Meanwhile, another 7.58% believe that minors' access to the Internet should be further restricted.

Parents and teachers, as the guardians of minors, bear important responsibilities for the healthy growth of minors and thus are more worried that the use of the Internet may bring some negative effects to minors. Not many parents and teachers expressed support for minors' Internet access, and more than 40% of them explicitly opposed minors' Internet access (online games are included), of which 40.86% of parents said they were more opposed or very opposed, and 49.28% of teachers said they were more opposed or very opposed. This is a quite high ratio. In the absence of any national organization, parents relied mainly on NPC deputies and the media to make their voices heard and express their demands, which at the time did bring the issue of adolescent online game addiction into the public eye and became a social issue that attracted widespread attention.

3.3. Development and Implementation of Anti-Indulged System

The Chinese government' s regulation of online games started from Internet cafes. As

early as 1998, the Chinese Ministry of Culture issued the Notice of the Ministry of Public Security, the Ministry of Information Industry, the Ministry of Culture, and the State Administration for Industry and Commerce on Regulating the Operation of "Internet Cafes" and Strengthening Safety Management. At the beginning of the 21st century, the rapid development of online games attracted the attention of various departments and a series of policies and regulations were issued. The governmental regulation of online games was not only limited to the regulation of Internet cafes, but the content was greatly expanded, including strengthening the content review of online game products (2004) and prohibiting the broadcasting of computer online game programs (2004). However, as also mentioned above, while the regulation at this stage has been strengthened and improved, it has also added many supportive policies. This seems as if the Chinese government is treating online games rationally and not shutting them down because of some of the social problems they cause.

In 2005, the issue of youth protection was given more attention. In particular, the incident of a 13-year-old boy jumping from a building in Tianjin in 2004 caused a public outcry, and the incident attracted the attention of relevant departments, and a series of measures to protect the healthy Internet access of teenagers were quickly introduced from 2005. One of the important initiatives is the development of the online game anti-indulged system for adolescent.

In June 2005, the General Administration of Press and Publication organized relevant departments, industry organizations, experts, educators, parents, etc. to jointly study and widely solicit opinions, and formulated the "Development of online game addiction-proof system (for trial implementation)", which uses technical means to limit minors' online game time in response to the inducements of minors' addiction to online games. After more than a year of development, the system was officially put into use in major games in 2007. At the same time, to implement the system among minors more effectively, the supporting "Real Name Authentication Program for Online Game Anti-Indulged System" was also developed and implemented simultaneously to facilitate parents to know whether their children are playing a certain online game or check whether their identity information is used by others.

According to the "Development of online game addiction-proof system (for trial implementation)" released in April 2007, the anti-indulged system developed and set up in online games defines minors' accumulated online game time within 3 hours as "healthy" game time; defines minors' accumulated online game time after 3 hours and then continued game time of 2 hours as "fatigue" game time; defines minors' accumulated online game time after 3 hours and then continued

time over 5 hours as "unhealthy" game time. The treatment of game revenue³¹ for different accumulated online time is as follows.

Accumulated Online Time	Game Revenue	
Within 0-3 hours	Normal	
After 3 hours, within 5 hours	Reduced to 50% of the normal value	
More than 5 hours	Reduced to 0 ³²	

Table 5. Game Revenue for Different Accumulated Online Time

After users are online, their continuous online time will be accumulated, called "accumulated online time"; after users are offline, their offline time will also be accumulated, called "accumulated offline time". If the accumulated online time exceeds 5 hours and enters the 6th hour, a warning should be given at the beginning of the entry: "You have entered unhealthy game time, please go offline immediately to rest. If you do not go offline, your health will be damaged and your game revenue has been reduced to 0." Thereafter, the warning should be given every 15 minutes. If the user's cumulative offline time has reached 5 hours, the cumulative online time will be cleared to zero, and the online time will be accumulated again if the user comes online again.

At the early stage of application, the mechanism of the anti-indulged system is to warn players of excessive online game time by pop-up windows and to reduce game revenue, i.e., to adopt artificial "diminishing marginal revenue", and to scientifically control game time by punitively reducing game revenue during unhealthy game time, to persuade players to arrange game time reasonably and play game healthily. The subject of this system constraint is shallowly addicted players, who will reduce their game time more or less under the system's restriction. While deeply addicted players will adopt a complete avoidance behavior and keep their original game time unchanged; ordinary players have a shorter game time, basically within the healthy game time, and their behavior is not affected by the system.

The 2006 survey report shows that more minors spend less than two hours playing online games each time, accounting for 62.27% of the total. Most minors play online games within the "healthy game time", so for most of them, the anti-indulged system does not have any effect. A small percentage of minors were addicted to online games, with 5.77% playing online games for more than four hours at a time. The system can play a certain role in persuading these underage players by reminding them through the internal system of the game

 $^{^{31}}$ Game revenue = experience value gained in the game + virtual items gained in the game.

 $^{^{32}}$ The reduction of game revenue to 0 does not mean that the player is forced to go offline and cannot log in to the game. Due to their characteristics, some games cannot provide game services when the game revenue is reduced to 0, i.e. you can log in to the game but cannot play the game.

to arrange the game time reasonably and play the game healthily. However, the impact of the anti-indulged system on deeply addicted players is very limited, and those youths who are addicted to online games will always think of various ways to circumvent the system 's restrictions on their game time, such as stealing their parents' ID cards for game registration, renting adult accounts, and buying plug-ins or server services provided by Internet cafes. Therefore, the effect of the implementation of the anti-indulged system has been questioned by all walks of life. But it is undeniable that it is an attempt and exploration to try to solve the problem of youth addiction to online games from the technical point of view, which is of milestone significance.

3.4. Interest-Group Politics Model

Wilson classifies government regulation into four political models based on the distribution of the perceived benefits and costs of government regulation across interest groups. The interest-group politics model is when the costs and benefits of government regulation are concentrated in a few groups and the interests involved are large. In this case, the opposing parties will use their political influence to fight to ensure that their interests are maximized.

		perceived benefits	
		widely narrowly	
		diffused concentrated	
perceived	widely	majoritarian	client
costs	diffused	politics	politics
	narrowly	entrepreneurial	interest- group
	concentrated	politics	politics

Table 6. Wilson' Regulatory Politics Model — Interest-Group Politics Model

The cost of developing and implementing the anti-indulged system, government regulation for online games, is mainly concentrated on game enterprises (including some industries associated with the online game industry chain), and its benefit is mainly concentrated on parents of minors. Game enterprises want to reduce regulations to maximize their economic benefits, while parents of minors want to strengthen regulations to protect their children (including reducing guardianship burden), and the two sides conflict.

To seek a more specific analysis, we can focus on the two interest groups, parents group, and game enterprises, and consider to what extent the perceived benefits and perceived costs of regulation are dispersed or concentrated in these two specific groups. Or in other words, how strong or weak the organizing power of these two specific groups is, if the organizing power is strong, the perceived benefits or perceived costs of regulation are more concentrated in this group, and vice versa more dispersed.

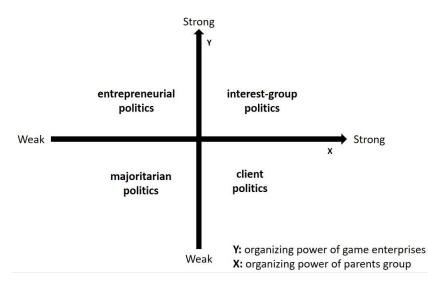


Figure 5. Wilson's Regulatory Politics Model

Game enterprise groups are more organized compared to parent groups. The first annual meeting of the Chinese game industry was held in January 2005 under the auspices of the GPC³³. The GPC is a national industrial social organization voluntarily formed by the game publishing industry in China, and all game publishing units, game enterprises, educational and scientific research, media, and other institutions registered and approved by the state department can join voluntarily and can safeguard the legitimate rights and interests of game enterprises by the constitution, laws, regulations and national policies. It can be said that game enterprise groups show a high level of organization, and the cost of regulation is also more concentrated.

The parents' groups are less organized compared to the game enterprises, mostly limited confined to a city-wide area, or even to school-based patriarch committees, lacking a national organization. However, the problem of teenagers' addiction to online games resonated a lot among the parents' groups, with more than 40% of parents explicitly opposing minors' access to the Internet (online games included in this) at that time, which is a considerable proportion. And the media made their voices and demands gain cohesive

³³ China Phonetic digital Game Association Working Committee (GPC).

power. Parents mainly relied on the NPC deputies and the media to make their voices heard and express their demands, which did bring the problem of teenagers' addiction to online games into the public eye at that time and made it a social issue that attracted widespread attention. It can be said that parent groups have also temporarily shown a high level of organization with the help of the media when faced with this particular problem of teenagers' addiction to online games. And the benefits of regulation are also more concentrated.

In this situation, then, the period when the anti-indulged system was developed and started to be used (2005-2007) applied to the interest group political model, while the perceived benefits and perceived costs of the regulation are both narrowly concentrated. Through the characteristics of the interest group political model, we can better understand the anti-indulged system as a regulation.

The Chinese government has a great deal of power in prescribing administrative measures and making administrative regulations, but it stands in a relatively neutral position when it comes to the prevention and control of youth online game addiction. The government will not solve all social problems, and not all social problems rise to public issues to be included in the policy agenda. The family-based social structure can solve part of the problem. For example, if parents can educate and supervise their children to arrange the game time reasonably well, then even if the society is obliged to be jointly responsible for the healthy growth of minors, the problem has been solved from the very beginning within the family. However, it is obvious that the family' s control over minors has partially failed, and minors' addiction to online games has become a social problem.

The government is neutral, more because it is in a dilemma over this issue. On the one hand, parents, teachers, and society have strong voices, and more than 40% of parents and teachers explicitly oppose minors' access to the Internet (including online games), so the government has to take policy measures to regulate online games. On the other hand, the general background of the policy is to support the development of the game industry, and it would be very detrimental to the development of such new things as online games and the Internet if minors are cut off from online games and even the Internet in compliance with the parents' demands. Therefore, the government stands in a relatively neutral position to regulate the conflict between game enterprises and parents to find a balance of development and progress for the prevention and control of youth online game addiction.

In the interest-group political model, the policy or regulation is often the result of a compromise between two parties. This is easily seen in the specifics of the anti-indulged system. Although more than 40% of parents express explicit opposition to minors' access to the Internet (online games are included), the regulation does not completely prohibit minors

from playing online games. The anti-indulged system exhorts players to limit their game time to a reasonable range, setting the healthy game time broadly to 3 hours and the maximum game time within 5 hours. Knowing that over 94% of minor players play online games for less than 4 hours at a time, so the time setting of the system is very lenient. And game enterprises have also compromised. The regulation does make game enterprises take part in social responsibility. They are required to install anti-indulged systems in every online game they release.

For game enterprises, the fluctuation of revenue from the player side affected by the system is mainly dominated by shallowly addicted players, because the behavior of deeply addicted players and ordinary players is relatively more stable. According to a survey report in 2006, only less than 40% of minors can be regarded as shallowly addicted players, and only 5.77% of minors play online games for more than four hours each time. The revenue composition of the game industry is complex and diversified, but the most important source of revenue lies in players' online game hours and game top-ups. And the anti-indulged system mainly affects the online game hours of minor players. The revenue of game enterprises will be negatively affected in the short term because the shallowly addicted players have more or less reduced their playing time. However, considering the proportion of minor players affected by the system and the focus on regulating Internet cafes at that time, the anti-indulged system was in a secondary position, and there were many loopholes for game enterprises to circumvent (e.g., the real-name authentication system is not well developed and the anti-indulged system was not designed to force players to go offline), so the negative impact of the anti-indulged system on game enterprises was relatively small. The system can, to a certain extent, extend the life cycle of game products by suppressing the aesthetic fatigue and boredom brought about by players' prolonged playing, so that the profit cycle of game enterprises can also be extended, which is beneficial to long-term income. And this can also explain, to some extent, why game companies have a more moderate attitude towards regulatory policies, actively responding to them and obeying management.

In addition, the standard of the anti-indulged system was jointly developed by the General Administration of Press and Publication in 2005 by organizing relevant departments, industry organizations, experts, educators, parents, etc., and widely soliciting opinions and its formation process is more transparent, which is also a characteristic of the interest-group political model. The two opposing sides, game enterprises and parents, both want to strengthen their respective influence through cooperation with third parties and win the sympathy of society through the media, so the regulation formation process is more transparent. Parents of minors, in particular, mainly rely on NPC deputies and the media to

make their voices heard and express their demands, bringing the problem of youth addiction to online games into the public eye and making it a social issue that has attracted widespread attention.

Although the cost of this regulation is mainly borne by game enterprises, while the benefit is mainly concentrated on parents of minors, and the original intention of the regulation is to protect minors, the interests of parents and minors are not well protected. With the lenient design of the healthy game time, game companies can circumvent the anti-indulged system and the system can only regulate those underage players who want to be regulated, the effectiveness of the implementation of the system has been questioned by the community. Of course, the anti-indulged system was only an attempt to solve the problem of youth addiction to online games from a technical point of view at the time, and it played a supporting role in the regulation of online games, which did not bring immediate and effective results. The fact is that the problem of minors being addicted to online games has not been solved well by the anti-indulged system, but the "Linyi Fourth People' s Hospital Internet Addiction Treatment Center" established in January 2006 has become the "savior" in the eyes of parents who are desperate to seek help. This treatment center was in the public and media eye for four years before it faded away, and during that time the extreme methods of electroshock treatment it used caused irreversible damage to the minds and bodies of countless minors.

In its long history, each era always has its problems, which may not have a solution at that time, but will be solved by the development of the era. The mainstream of the times is to conform to economic and social development. The beginning of the 21st century was a period of rapid development of online games in China, and the policy also gave support. The game industry has a huge penetration and influences a considerable number of related industries, and with the development of online games on a large scale, related industries have also gained a huge commercial space. In such a flood of development, some minors whose minds are not yet mature and whose self-control is not strong have inevitably fallen victim to the lack of perfect regulation, the lag of regulation, and the backward concept of parents.

Chapter 4. Implementation Period (2007-2019)

4.1. Game Enterprises: From Client Games to Mobile Games

The basic content of the anti-indulged system (3 hours of healthy game time) has remained unchanged for 12 years since it was officially put into use in 2007. In 2019, the State Press and Publication Administration issued the Notice on Preventing Minors from Being Addicted to Online Games, which adjusted the basic content of the anti-indulged system to further limit and compress the length of time for providing online game services to minors.

During the more than 10 years that the anti-indulged system has remained in place, the gaming industry has continued to grow. After 2009, China' s online game industry entered a mature period and the growth rate of the market scale slowed down. According to the survey data of the Game Industry Committee of the China Version Association, the growth rate of China' s online game market tends to be stable after several years of rapid growth.

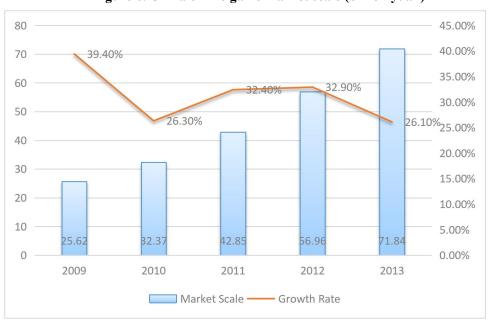


Figure 6. China online game market scale (billion yuan)

Data source: Game Industry Committee of China Version Association

However, thanks to the policy environment that the government continues to strongly support the development of the cultural industry, the growth rate of the game industry scale has slowed down, but the volume of the game industry is still growing. Relevant departments continue to introduce a large number of policies to promote the development of China' s online game industry with more pragmatic and systematic encouragement measures. The approval and supervision of the online game industry have been strengthened, and the relevant regulatory system has also been improved.

In addition, the improvement of the policy environment has also indirectly changed the attitude of the national government departments towards the e-sports industry. And the policy orientation has gradually changed from regulation and restriction to encouragement and standardized development, which has led to the stable development of China' s e-sports industry. With Chinese players winning many major international e-sports competitions since 2005, the public opinion on e-sports and even online games has gradually become better.³⁴

During the more than 10 years that the anti-indulged system has remained in place, the main place for online game players to play has also changed. Thanks to the development and popularity of computers and smartphones, by 2012, 73% of players chose to play online games at home, an increase of about 8% compared with 2010, and the proportion of playing games in Internet cafes continued to decline to 19%.³⁵ Internet cafes are no longer the main place for online game players to play.

In the 2006 survey results, the home was the main place for minors to access the Internet, followed by Internet cafes. The percentage of those who usually surf the Internet mainly at home was 46.78%; those who usually surf the Internet mainly at Internet cafes was 23.79%. According to the survey data in 2012, nearly 80% (78.4%) of minors had used mobile terminals to access the Internet, of which 23% used mobile terminals every day, higher than the proportion of computer access (19.5%). The Internet position of minors is gradually shifting from traditional Internet to mobile Internet.

In conclusion, during the more than 10 years that the anti-indulged system has remained in place, China's game industry continues to develop, the e-sports industry also develops in a standardized and stable way, and the public opinion on e-sports and even online games gradually becomes better. With the development and popularity of computers and smartphones and the development of mobile games, the Internet positions of minors are gradually shifting from the traditional Internet to the mobile Internet, and the devices on which minors play online games are also shifting from computers to smartphones. All these changes are indicating that the thinking of solving the problem of minors' addiction to online games should also be adjusted to keep up with the times. And these changes have also led to a shift in the distribution of the perceived cost of government regulation among game enterprises, laying the background foundation for the subsequent strengthening of the

³⁴ 李占岳,李杨宁.《中国电子竞技产业政策的变迁:历程、逻辑及演变趋势》.

³⁵ 易观智库. 2012. 2012中国网络游戏用户行为研究. 北京.

anti-indulged system.

The game enterprise group is highly organized and the perceived costs of regulation are relatively more concentrated. Before the development and popularity of smartphones, the main carrier of online games was computers, which means that online games were computer games(client games³⁶). Later, with the development of smartphones, mobile games quickly occupied the game market.

The development of mobile games in China can be traced back to as early as 1998, but due to the level of technology and the development of cell phones, mobile games accounted for a very small share of the game market in China in the early days. It was not until the introduction of the iPhone that the innovation of mobile games was brought. In China, a new era of mobile games was opened after 2009, with smartphones represented by iPhone and mobile application stores represented by AppStore, changing the dominant position previously held by operators in mobile games. The playability of mobile games is improving and the way of operation is changing. Along with the popularity of smartphones, the market size of the mobile game industry expanded dramatically in 2012 and attracted a large influx of capital. And after 2015, the performance of smartphones continued to improve, stimulating the mobile game industry to explode in growth.³⁷ The "2016 China Game Industry Report" shows that by market segmentation, the sales revenue of the mobile game market was 81.92 billion yuan in 2016, accounting for more than the client game market, reaching 49.5% and becoming the segment with the largest share and the fastest growth rate.

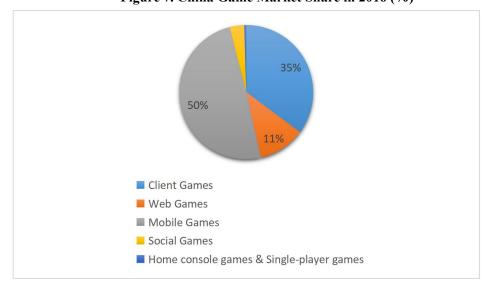


Figure 7. China Game Market Share in 2016 (%)

Data source: 2016 China Game Industry Report

³⁶ Client games: Traditional online games that rely on downloading a client and playing on a computer.

³⁷ 乔永晟. 2019. 手机网络游戏的发展现状、问题及对策. 南宁: 南宁师范大学.

Mobile games are developing rapidly, but due to the lag of relevant policies, the impact of regulation on mobile games also appears to lag. For example, in 2011, the "Notice on Launching Real-Name Verification of Online Games Anti-Indulged System" was issued, stating that the real-name verification of all online games (excluding mobile games) anti-indulged systems should be strengthened. It explicitly excludes mobile games from the regulation. For the group of game enterprises that bear the cost of regulation, there is a diversion between computer games and mobile games, making the perceived costs of the regulation relatively more diffuse.

4.2. Parents' Predicament: Losing Public Support

At the early stage of the development and operation of the anti-indulged system, the system has been in an auxiliary position in the regulation of online games. The government' s regulation of online games started with the governance of Internet cafes at the earliest, and the governance of Internet cafes has also been the focus of the government' s regulation and supervision of online games for quite a long time. As a business place for Internet access services, Internet cafes are counted as terminal sellers in the online game industry chain. In the regulation of online games, the government has focused too much on Internet cafes. As for the anti-indulged system, the government did not make any follow-up reinforcement adjustments after it started its official operation.

Because the maximum game time of 5 hours is too broad, coupled with the imperfect real-name authentication system, game enterprises and minors can circumvent the anti-indulged system, which makes the system not play a good role in solving the problem of minors' addiction to online games. The best proof of this is the network addiction treatment center, the most famous of which is the "Linyi Fourth People's Hospital Network Addiction Treatment Center", which was established in 2006 and had been existing for four years. The center illegally used unscientific electroshock therapy to treat Internet addiction until 2009 when the profitable shady business was exposed that the center made 81 million RMB over several years³⁸, its electroshock therapy was subsequently called off.

Initially, most of the reports that appeared in the mainstream media praised the network

³⁸ 华商报. 2009. 临沂网戒中心数年敛财8100万. 8月25日. https://baike.baidu.com/reference/1543 8348/c6548xwyQ3MP-ZD3RnXc0vvaiDAD1ql4Ii01zswUxHAERfslVvAxd-JPJmYV4X4KQfu7MW 7F7RJCbfklgJZS327Hs9iz7C9aUDeIUXTwjvMF

addiction treatment centers, some media outlets released documentaries and books to promote them, as well as some television stations and newspapers, published corresponding reports. This is because the existence of the network addiction treatment centers has "solved" the of minors being addicted to the Internet (not only online games). The Linyi " problem " Network Addiction Treatment Center is an institution that is affiliated with the Linyi Fourth People's Hospital for the treatment of Internet addiction. But instead of calling the center a hospital, its nature is closer to that of a drug rehabilitation center or a juvenile detention center. The center charges high fees and uses mainly electric shock "treatment", while "patients" are subjected to various forms of mental brainwashing. The "patients" are managed in the form of a "concentration camp" and those who violate the rules are subjected to various forms of corporal punishment and electric shocks. It was not until 2009 that the media began to question the treatment modalities of the center. According to the national authorities, the electroshock treatment apparatus in the center are illegal products with a current strength that exceeds the normal treatment level and poses a risk of cognitive damage. With the media coverage, the center has caused a lot of controversies. In response, the parents of the Linyi Network Addiction Treatment Center's "family committee" came together to defend the center, arguing that the general public simply could not understand the damage done to their families by Internet addiction and that they had signed an agreement to endorse electroshock treatment, with some parents even taking the initiative to request electroshock treatment for their children. It is because of these distorted needs of the parents that the industry of Internet addiction treatment is rampant in the gray area where effective supervision is lacking.

The "Internet addiction electroshock therapy" used in treatment centers is actually: the use of electric shock to produce a strong tingling sensation, the application of brainwashing language guidance under the feeling of strong physical discomfort, and the behavioral induction of the people receiving treatment in a state of extreme mental instability, which is coercive and harmful to physical and mental health. This "therapy" is similar to torture in that it forces the person to fear the harm caused by the act and thus fear the Internet. Long-term implementation will lead to a series of mental problems such as mental breakdowns, and most teenagers will have psychological shadows, leading to unhealthy growth. These types of Internet addiction treatment centers solve part of the problem to some extent but use unscientific and inhumane treatment methods that come at the cost of the physical and mental health of the teenager.

The anti-indulged system has had little effect and the problem of minors being addicted to online games has not been solved by policy, so some parents of minors have had to internalize the problem and turn to the help of network addiction treatment centers. These centers are not solving the "problem" of minors' addiction to online games, but are directly destroying the minors themselves who have these "problems".

With the development of the times, the upgrading and popularization of the Internet, people's concepts are also opening up, but the problem of minors' online game addiction has not been naturally self-improved and solved over time, but seems to have become a norm for many years. In a survey in 2010, it was found that 85.1% of minors often play online games, and more than 70% of minors surf the Internet for less than 2 hours each time. The parents surveyed are relatively conservative in their attitude towards the Internet and their children' s access to the Internet. And they are deeply influenced by the viewpoint of "Internet addiction" . 90% of the parents think that "Internet addiction" is very common, and more than half of them think that Internet addiction is " extremely serious". The official report explains that "overall parents' perceptions of their children's Internet use lag behind their children' s actual use". The report also pointed out that from 2007 to 2010, a large number of negative reports about minors and the Internet were found in the domestic media, and the negative public opinion environment was not conducive to minors' Internet use and could not reflect the real situation of minors' Internet use comprehensively and objectively, and it was very easy to mislead the public and parents. By 2015, 6.7% of students said they had been online for more than 4 hours, and 1.4% admitted to having been online overnight. And a survey³⁹ in 2016 showed that the prevalence rate of Internet addiction among Chinese adolescents was 10.4%, with 10.2% moderately and 0.2% severely addicted to the Internet.

The group of parents who enjoy the benefits of regulation is itself not well organized. In the early stages of the formation of the anti-indulged system, it was thanks to media coverage and help that the narrowly concentrated benefits of regulation were shown for a short time. With the development of the times, the Internet has been upgraded and popularized, and people's perceptions have been opening up. The game industry and e-sports industry have developed steadily, and the general public opinion on e-sports and even online games has gradually become better. Negative media reports on minors and the Internet can no longer cause an uproar at the level of the whole society, and the problem of minors being addicted to online games tends to be normalized. In 2010, the "National Medium and Long-term Education Reform and Development Plan (2010-2020)" was promulgated, requiring the establishment of parent committees in primary and secondary schools. However, it is still school-based, which does not help much in strengthening the overall organization of parent groups. Moreover, due to the collective action dilemma, the perceived benefits are more

³⁹ Wu, X., Zhang, Z., Zhao, F., Wang, W., Li, Y., Bi, L., Qian, Z., Lu, S., Feng, F., Hu, C., Gong, F. and Sun, Y., 2016. Prevalence of Internet addiction and its association with social support and other related factors among adolescents in China. *Journal of Adolescence*, 52(1), pp.103-111.

diffused in the parent groups.

4.3. Majoritarian Politics Model

Wilson classifies government regulation into four political models based on the distribution of the perceived benefits and costs of government regulation across interest groups. The majoritarian political model occurs when the costs and benefits of government regulation are dispersed, i.e., all or most of society expects to receive the benefits, and all or most of society bears the costs.

		perceived benefits	
		widely	narrowly
		diffused	concentrated
perceived	widely	majoritarian	client
costs	diffused	politics	politics
	narrowly	entrepreneurial	interest- group
	concentrated	politics	politics

Table 7. Wilson's Regulatory Politics Model — Majoritarian Politics Model

As mentioned earlier, many things have changed in the 10 years or so and the anti-indulged system has remained unchanged. In turn, these changes have led to a shift in the distribution of the perceived benefits and costs of government regulation across parents group and game enterprises.

With the development of smartphones, China has opened a new era of mobile games since 2009. Mobile games have rapidly occupied the game market, but relevant policies and regulations are relatively lagging. For the group of game enterprises that bear the cost of regulation, there is a diversion of computer online games and mobile games, making the perceived cost of the regulation relatively diffused. Meanwhile, the phenomenon of minors being addicted to online games has always existed and gradually normalized. Internet addiction treatment centers also gradually withdrew from public view after they were investigated and penalized in 2009. With the gradual improvement of social opinion on online games, negative media reports on minors and the Internet no longer cause a social uproar. The media and social support were greatly reduced, and the organizing power of the parents group returned to its former low level.

As the perceived benefits and perceived costs of regulation changed from concentrated to diffused, Wilson' s regulatory politics model also changed from the interest-group politics model to the majoritarian politics model.

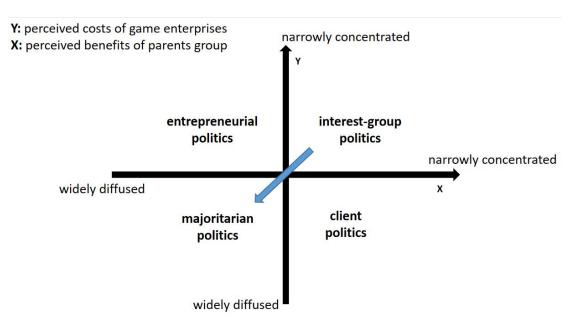


Figure 8. Wilson's Regulatory Politics Model

In the majoritarian politics model, since no one can particularly benefit or suffer from government regulation, there is no strong incentive for specific interest groups to support or oppose it. Since its inception, the anti-indulged system has been flawed and loosely regulated, resulting in a little effect. Parents have not benefited much from the anti-indulged system, and also, game enterprises have not suffered much from the anti-indulged system. As a result, while society continues to question the usefulness of the system, there is no strong support for the system and no strong opposition to it. In such a delicate balance, the anti-indulged system has maintained its stability.

Moreover, in the majoritarian politics model, due to the collective action dilemma, the access of policy issues to the political agenda is crucial to the formation of regulation. Usually, the external factors that influence the formation of regulation are mainly the domestic and international environment and the change in mainstream social thought, while the internal factors are mainly the participation of influential advocate politicians, public interest groups, and social media. At that time, the general environment in China was that the Internet was developing and popularizing, the game industry was developing continuously, and the general attitude of the mainstream society towards the Internet and online games was gradually improving. The problem of minors being addicted to online games tended to be normalized,

and negative media reports on minors and the Internet could no longer cause an uproar at the level of the whole society. Even officials claim that a large number of negative reports on minors and the Internet in the domestic media cannot fully and objectively reflect the real situation of minors' access to the Internet and that the negative public opinion environment is not conducive to minors' Internet use and can mislead the public and parents. The reduced involvement of social media in the issue of youth addiction to online games, coupled with the collective action dilemma, makes it difficult for parent groups to put the issue of further strengthening the anti-indulged system to improve the problem of youth addiction to online games was not on the political agenda, and the subsequent strengthening of regulation would not be possible.

The majoritarian politics model lasted for less than 10 years. With the continuous development of mobile games, they gradually became the main part of online games and integrated into the game industry. Tencent launched the "Tencent Growth Guardian Platform⁴⁰" in 2017 as a way to assist parents in the benign and healthy supervision of their underage children's game accounts. The diversion phenomenon of computer games and mobile games no longer exists for the group of game enterprises that bear the cost of regulation. Also with the improvement of the relevant policy lag, the perceived costs of regulation are re-shifted to concentrated.

With the popularity of smartphones, mobile games have a wider audience among the underage population than computer games and are more likely to be overused due to their fragmented use. The issue of game addiction prevention was once again making waves, with nearly 50% of parents concerned about underage overuse of the Internet and keeping a watchful eye on their children' s online behavior. With the optimization of the government' s open government and people-friendly service reform, parents have more channels⁴¹ to reflect their children' s addiction to online games to the government. Even without the help of mass media, parents can still easily complain and report game problems with a simple operation via their smartphones, and a large number of parents have reported the problem of minors' addiction to online games, which has attracted the attention of government departments. The perceived benefits of the regulation gradually changed to concentrate as the power of the parents group was again coalesced.

⁴⁰ Similar to the "Anti-Indulged System", it is an internal version of the game enterprise and is only for Tencent's online games.

⁴¹ For example, China's online game complaint platform, Internet information service complaint platform, etc.

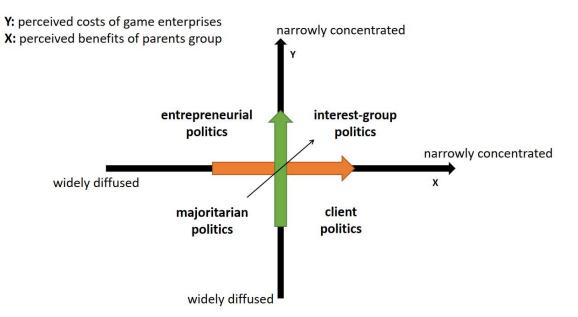


Figure 9. Wilson's Regulatory Politics Model

As the perceived costs and perceived benefits of regulation became concentrated again, the majoritarian politics model no longer applies. The stability maintained by the anti-indulged system in the balance of the majoritarian politics model can no longer be maintained and a change is ushered in.

Chapter 5. Enhancement Period (2019-2021)

5.1. Parents' Concern and the 1st Enhancement of the System

With the popularity of smartphones, mobile games have a wider audience among the underage population than computer games and are more likely to be overused due to their fragmented use. The issue of online game addiction was once again making waves among parents of minors.

The "2019 National Survey Report on Internet Usage of Minors" shows that 61% of underage Internet users play online games regularly. Among them, 56.3% play mobile games and 24.6% play computer games. Mobile phones are the main device for minors to play online games, and the proportion of minor Internet users who own their mobile phones has reached 63.6%. Compared with computer games, mobile games have a wider audience in the underage group and are more likely to be overused due to their fragmented use.

Among underage mobile game users, 12.5% play mobile games for more than 2 hours a day on weekdays, which may harm their normal study and life. On holidays, this ratio rises significantly, with 20% of minor users playing mobile games for more than 2 hours a day, of which 10.7% play mobile games for more than 3 hours a day.

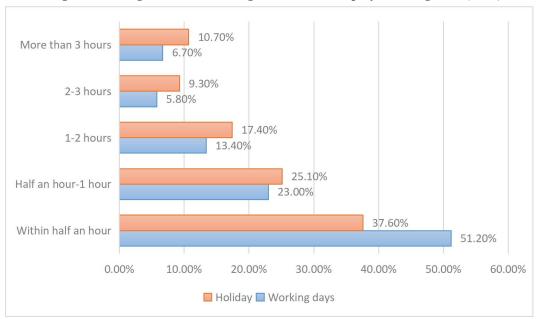


Figure 10. Length of time underage Internet users play mobile games (2019)

Data source: 2019 National Survey Report on Internet Usage of Minors

Regarding the subjective reliance of underage Internet users on the Internet, the survey shows that 17.3% of them think they are very dependent or relatively dependent, while 44.9% think they are not very dependent or not dependent at all.

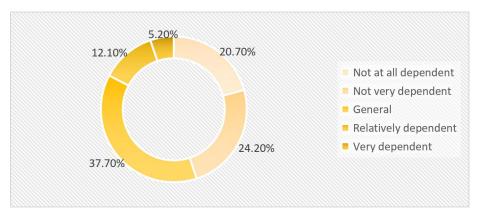
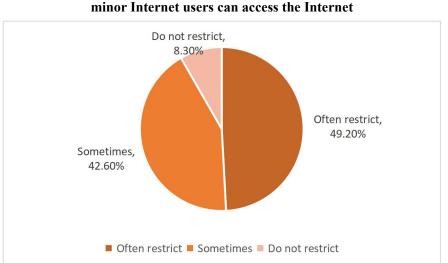
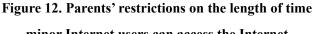


Figure 11. Minor Internet users' subjective reliance on the Internet

In addition, the survey shows that 49.2% of underage Internet users said they were often restricted by their parents on the length of time they spent online. This indicates that nearly 50% of parents are concerned about excessive Internet use by minors and keep an eye on their children's online behavior and impose restrictions. 8.3% of underage Internet users said that the length of Internet access was not restricted by parents, which is consistent with the proportion of underage Internet users who may use the Internet excessively (9.9%).





Data source: 2019 National Survey Report on Internet Usage of Minors

Data source: 2019 National Survey Report on Internet Usage of Minors

In conclusion, with the popularity of smartphones and the development of mobile games, the online game position of minors is gradually shifting from computers to mobile phones. The mobile phone is more likely to be overused because of its fragmented usage. The role of regulating Internet cafes in preventing minors from being addicted to online games will be greatly reduced, and the focus of regulation should also shift from Internet cafes to mobile games, and the anti-indulged system will play a bigger and more important role.

The problem of minors' addiction to online games has always existed, and by 2019, nearly 50% of parents have concerns about minors' excessive Internet access and maintain concerns and restrictions on their children' s online behavior. With the optimization of the government' s open government, online government, and people-friendly service reform, parents have more channels such as the "China online game complaint platform" and "Internet information service complaint platform" to reflect the problem to the government. Although there were no major news events that stirred society, the media did not help parents to create public opinion as they did more than 10 years ago. Moreover, social opinion was more enlightened towards online games, and the problem of minors' addiction to online games no longer resonated with the public. However, a large number of parents have reported the problem of minors' addiction to online games, and the problem has still attracted the attention of relevant government departments.

The first strengthening of the anti-indulged system after 12 years came in 2019 when the State Press and Publication Administration issued the "Notice on Preventing Minors from Being Addicted to Online Games", which required strict control of minors' use of online game periods and hours. In the notice, the official mentioned that "the phenomenon of minors being addicted to online games and over-consumption has adversely affected the physical and mental health of minors and their normal study life, and has been strongly reflected by the society". This can be said to be one of the important reasons for upgrading and strengthening the anti-indulged system.

In fact, in 2017, the government signaled enhanced regulations. In 2017, the relevant ministries revised and issued the "Interim Measures for the Management of Online Games", of which Article 21 states that online game operators should require online game users to register in their real names using valid identity documents and save user registration information.

The mechanism of the anti-indulged system is to limit the playing time of players who are judged to be underage, and one of its most important prerequisites is to rely on the real-name authentication system to determine whether a player is underage. At the early stage of the development and operation of the anti-indulged system, the real-name identity information database was just beginning to be established. Due to technical limitations and the fact that the personal information of residents was not yet connected nationwide, the identity verification process of the real-name authentication system was lengthy and complicated. Operators needed to periodically submit the real-name identity information of those initially judged to be adults in bulk to the public security department for verification monthly, and the public security department would determine whether the information was true and ultimately determine whether the user was an adult based on the verification results. In 2011, the official issued the "Notice on Launching Real-Name Verification of Online Game Anti-Indulged System", saying that after full consultation with online game operation enterprises, the "Real-Name Verification Process of Online Game Anti-Indulged System" was formulated, and the software development of the real-name verification system of online game anti-indulged was completed. It also said that the conditions for the implementation of the real name verification of online games anti-indulged system are mature and the preparations are basically in place and decided to launch the real name verification of online games (excluding mobile games) nationwide. This is strengthening and improvement of the real-name verification system, but it is still circumventable. The "Interim Measures for the Management of Online Games" in 2017 again emphasized real-name registration, and only the step of real-name verification to truthfully determine underage players can the subsequent anti-indulged system be effective. In 2019, CCA' s experience with 50 games found that only 41 games were enabled with the real-name system. Moreover, some of the real-name verification methods perform practically no function, for example, only 17 games force users to verify their real names when logging in, and many games do not force users to verify or only verify their real names when incurring consumption.

On October 25, 2019, the State Press and Publication Administration issued the "Notice on Preventing Minors from Being Addicted to Online Games", which provides more standardized guidelines for clarifying the anti-indulged standards of the game industry. It requires that online game enterprises shall not provide game services for minors in any form from 22:00 daily to 08:00 the next day. The length of game services provided to minors by online game enterprises shall not exceed a total of 3 hours per day on legal holidays and 1.5 hours per day at other times. The anti-indulged system has seen its first upgrade and enhancement.

This strengthening of regulation has changed the mechanism of the anti-indulged system. Initially, the main mechanism of the anti-indulged system was to persuade players to rationalize their game time and play healthily by providing pop-up warnings and artificial " diminishing marginal returns " to players who spent too much time online. With the enhanced regulation, the system acts as a strict game time controller, limiting the game time of all minor players to a fixed value (maximum game time). The enhanced maximum game time (1.5 hours on weekdays and 3 hours on holidays) is significantly shorter than the 5-hour maximum game time (the accumulated online time can be cleared after 5 hours of offline time) when the anti-indulged system first came into operation in 2007. The enhanced regulation not only strictly controls the length of time minors can play online games but also increases the restrictions on periods. From 22:00 daily to 08:00 the next day, online game enterprises are not allowed to provide game services for minors in any form. This is similar to South Korea' s Cinderella law⁴². The restriction on game periods prevents minors from playing online games late at night, which is a protection for their healthy rest.

The upgrade of the anti-indulged system shortened the healthy game time to 1.5 hours on weekdays and 3 hours on holidays. It leaves between 12.5% and 25.9% of underage players restricted on weekdays and 10.7% on holidays. This will inevitably take a toll on game enterprises, but this part of the discussion will be put aside for later analysis, as the government has again strengthened regulations less than two years after the enhancement of the anti-indulged system in 2019.

5.2. Parents' Concern and the 2nd Enhancement of the System

On August 30, 2021, the State Press and Publication Administration issued the "Notice on Further Strict Management to Effectively Prevent Minors from Being Addicted to Online Games", which requires that the hours of providing online game services to minors be strictly limited and that all online game enterprises may only provide one hour of service to minors from 20:00 to 21:00 daily on Fridays, Saturdays, Sundays and legal holidays. This is another enhanced upgrade to the anti-indulged system following the "Notice on Preventing Minors from Being Addicted to Online Games" issued by the State Press and Publication Administration on October 25, 2019, an interval of just under 2 years.

In an exclusive interview with reporters, the relevant person in charge of the State Press and Publication Administration made an explanation of the background and requirements of the notice. In recent years, while China's online game industry has been developing rapidly,

⁴² Cinderella Law (November 20, 2011, to December 31, 2021) is an amendment to the Youth Protection Act that restricts late-night online gaming for young people. It is commonly known as the "Cinderella Law" because of the mandatory disconnection of online games for minors after midnight (until 6:00 a.m.).

some problems have also emerged, especially the problem of minors ' addiction to online games, which has caused widespread concern in society and strong feedback from parents. 2019 Notice of the State Press and Publication Administration on Preventing Minors ' Addiction to Online Games stipulates that the length of game services provided by online game enterprises to minors shall not exceed a total of 3 hours per day on legal holidays and 1.5 hours per day at other times. In this regard, many parents reflected that the standard is still lenient and suggested that it should be strictly compressed. Taking into account the needs of minors' learning life and healthy growth, the notice makes a stricter limit on the length of time that online game enterprises can provide online game services to minors. In addition, the reason why a small amount of time is left open to minors is that some teachers and parents reflect that moderate exposure to games is understandable and acceptable, especially some games that have a positive effect on the healthy growth of youth.

Due to the impact of the COVID-19 epidemic, large-scale online education was launched nationwide in the first half of 2020. The vast majority of students took online classes at home, and Internet usage among minors has soared. While minors are using the Internet to access epidemic news, stay on top of their studies, and stay in communication with friends, excessive Internet immersion has also led to increased problems such as online game addiction.

The "2020 National Study on Internet Use among Minors" shows that 19.9% of underage Internet users believe that the Internet had more negative effects on their lives during the epidemic, as having fun online interfered with their studies.

During the epidemic, the Internet helped, to some extent, to relieve the psychological pressure of minors who could not go out and go to school normally. Data showed that 33.5% of underage Internet users increased their time for online entertainment during the epidemic. At the same time, the negative impact of the Internet on minor users, such as Internet addiction, the influence of undesirable content, and excessive consumption, continued to exist.

The upgrade to the anti-indulged system in 2019 did not have the desired effect. Even with the 1.5-hour maximum game time limit for underage players on weekdays and 3 hours on holidays, 13.2% of underage mobile game users played mobile games for more than 2 hours a day on weekdays, up from 12.5% in 2019, according to data from 2020. And those who play mobile games for more than 3 hours a day on holidays reached 12.4%, again higher than the 10.7% in 2019. For these underage players who are at risk of being addicted to online games or are already addicted to online games, the upgrade of the anti-indulged system did not improve their situation, but rather the reverse psychology made them not only circumvent the time limit of the system but also increase their playing time. This finding is a great

challenge to the anti-indulged system.

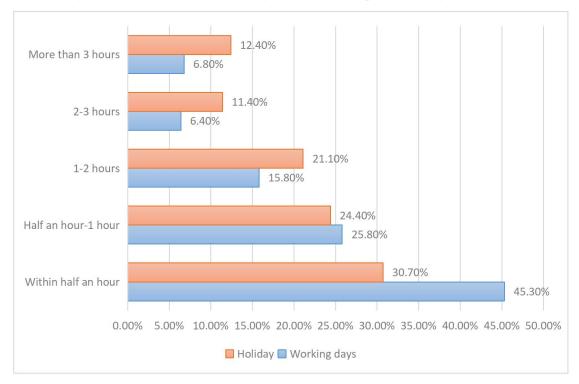


Figure 13. Length of time underage Internet users play mobile games (2020)

Data source: 2020 National Survey Report on Internet Usage of Minors

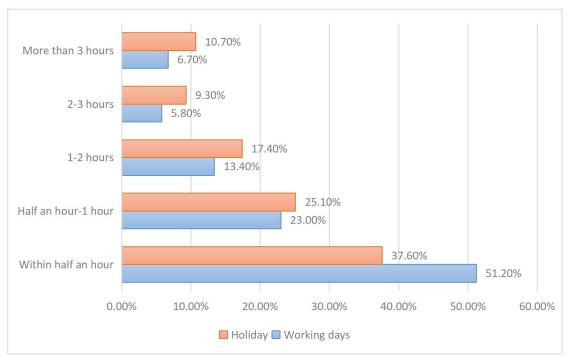


Figure 14. Length of time underage Internet users play mobile games (2019)

Data source: 2019 National Survey Report on Internet Usage of Minors

Among underage Internet users who frequently engage in online entertainment activities, the proportion of those who think the anti-indulged system is useful is 65.6%, up 6.7 percentage points from 2019 (58.9%). Even so, 18.7% of underage Internet users still think the system is useless.

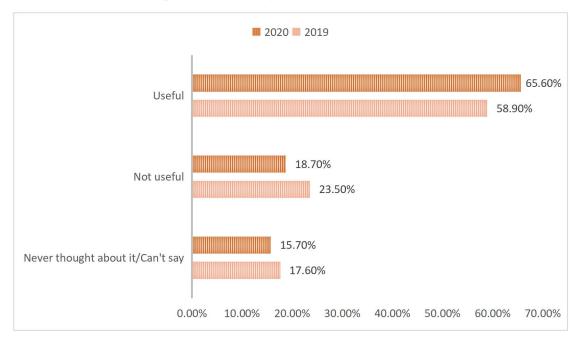


Figure 15. Impact of anti-indulged system on underage Internet users

Data source: 2020 National Survey Report on Internet Usage of Minors

During the epidemic, the amount of time spent by underage Internet users on online entertainment increased, and more than 30% of parents were worried about their children spending too much time online. And the percentage of parents who directly prohibited their children from accessing the Internet was 10.1%. About 80% (80.7%) of parents manage their children' s online entertainment time by making a pact with them; among the remaining 20%, 11.9% of parents take the approach of strictly prohibiting their children' s online entertainment, and 7.4% of parents do not have the energy or ability to manage their children' s online entertainment behavior.

More than half of parents agree that the family is the key to ameliorating the negative effects of Internet access on minors. And 23.9% of parents believe that stricter supervision of undesirable content by all sectors of society is most needed to ameliorate the negative effects of Internet access on minors. However, when asked how to reduce the negative effects of Internet access on minors, nearly half of parents(47.7%) believe that, in addition to family supervision, the most effective means is for Internet companies to improve the protection

functions and mechanisms for minors' Internet access. And 20.2% of parents believe that the government should step up its supervision of such problems.

In conclusion, the time spent by underage Internet users on online entertainment during the epidemic has increased, while at the same time, negative effects such as Internet addiction continue to exist. Parents are concerned about this and hope that Internet companies will improve the relevant mechanisms and that the government will increase supervision. The upgrade of the anti-indulged system in 2019 did not have the desired effect, and the proportion of underage mobile game users with an average daily gaming time of more than 2 hours on weekdays and 3 hours on holidays has instead increased. The system has been challenged. Against this backdrop, the government reinforced the anti-indulged system again in 2021, strictly limiting online gaming hours for minors to 20:00 to 21:00 daily on Fridays, Saturdays, Sundays, and legal holidays. Its effect is yet to be seen, but, certainly, the strengthening of the regulation will inevitably have an impact on game enterprises.

5.3. Game Enterprises: No Bargaining

Game enterprises have largely cooperated actively with the strengthening of the anti-indulged system and have not taken collective protest actions. In September 2021, the Game Publishing Working Committee of the China Audio-visual and Digital Publishing Association, together with its members and relevant game enterprises, launched the "Self-regulatory Convention on Anti-Addiction in the Online Game Industry" under the guidance of the national competent authorities. By the end of 2021, 411 game enterprises had signed it. Game enterprises should resolutely implement the real-name authentication and anti-indulged system and actively cooperate with the state to prevent minors from being addicted to online games, etc.

Regarding the strengthening of the anti-indulged system, Zhang Shuyue, a writer for People' s Daily, believes that it will be a butterfly effect, but will not turn into a storm for the game industry. After the minor players are stripped out, the game industry can concentrate on talking more "business" with adults.⁴³

The current domestic online games in China are free to play and paid for props. The free nature of the game itself makes the underage users who do not have much financial payment ability in the game occupy a certain proportion. According to the "2019 National Research Report on Internet Usage of Minors," the majority of underage Internet users who play

⁴³ 张书乐. 2021. 未成年人每周网游最多三小时! 最严防沉迷下,"蝴蝶效应"很小?

mobile games have not paid for games, accounting for 83.1%. And 2.0% of users spend an average of RMB 51 to 100 per month, and 3.3% of users pay more than RMB 100 per month for games.

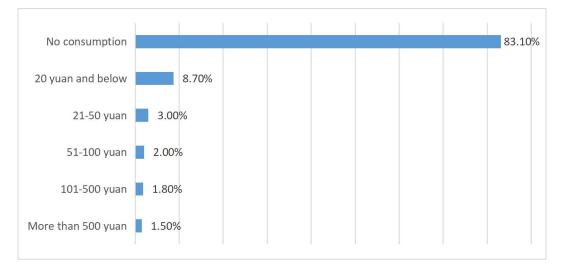


Figure 16. Average monthly spending on mobile games by underage Internet users

Data source: 2019 National Survey Report on Internet Usage of Minors

Looking at the gaming industry giant - Tencent, in Q2 2021, the share of under 16 players in its game turnover in China was 2.6%, including 0.3% for under 12 players. In Q4 2020, the turnover of under 18 users in Tencent game China accounted for only 6.0%, of which the turnover of underage users under the age of 16 accounted for only 3.2%. And according to CMGE⁴⁴ 2021 semi-annual report, in the first half of the year, the percentage of underage players (under 18 years old) in the company' s domestic game revenue was about 0.026%. Some people in charge of the game company said that the game consumption of minors does not account for a large proportion of the whole game revenue, and not earning this money will not significantly affect the game company' s revenue.

The goal of further implementation of the minor online game protection mechanism is in fact to form a protective wall. For two decades, the anti-indulged system and the recent restrictions on underage gaming have been reinforcing and raising the wall, making it more expensive and difficult for minors to climb over it, and ultimately, the vast majority of minors will no longer be addicted to online games. However, with the strict limitation of game hours for underage game users, it may lead to a change of game user structure afterward.

According to the 2021 China Gaming Industry Report, in 2021, China's gaming user

⁴⁴ CMGE(China Mobile Games Entertainment): China's leading mobile game developer and publisher, Apple's Top 50 Global Publishers.

scale grew 0.22% year-on-year, with little change in user scale compared with 2020, and the dividend of the gaming population tended to be saturated. In addition, the user scale in the second half of the year showed a decline compared with the first half of the year, mainly because of the new anti-indulged system regulations coming into effect and the user structure tending to be healthy and reasonable.⁴⁵

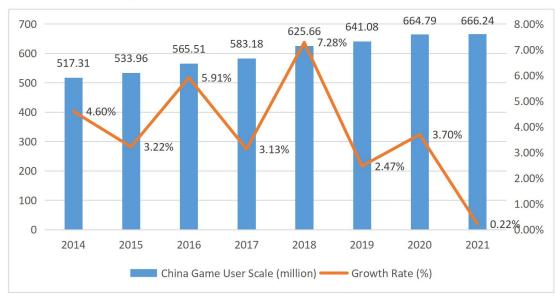


Figure 17. China Game User Scale and Growth Rate

Data source: 2021 China Gaming Industry Report

Some game enterprises are already trying to run adult-only games that are forbidden to be played by users under the age of 18. This latest enhancement to the anti-indulged system will push game enterprises to adjust their game economic models, and the game industry will instead focus on talking more "business" with adults, focusing on attracting the influx and retention of adult users and catering to the style and preferences of adult users. With the strict restriction on the game hours of underage game users, the percentage of underage game users to the turnover of game enterprises will be further reduced. The user composition will also be dominated by adult players, the proportion of underage users will be reduced, and the overall user structure tends to be healthy and reasonable. However, this change will have a huge impact on the e-sports industry.

In 2021, the sales revenue of the e-sports game market in China is 140.181 billion yuan, which is 3.624 billion yuan more than that in 2020, with a year-on-year growth of 2.65%, and

⁴⁵ Here the "user structure tending to be healthy and reasonable" is the official statement in the 2021 China Gaming Industry Report. There is no explanation as to why the user structure would tend to be healthy and reasonable if the proportion of minors among online game users decreases. This kind of statement is suspicious that minors playing online games are unhealthy and unreasonable.

the growth rate shrank by approximately 42% year-over-year from 2020. Revenue from e-sports game sales is the main revenue source of the e-sports market. Due to the impact of the overall gaming market, the increase in revenue size of the e-sports market has decreased; the continued impact of the epidemic in 2021 has reduced the offline activities of important e-sports events, while the online model is difficult to achieve commercial realization; the policy requirement of anti-indulged system in online games has had an impact on the commercial operation of both clubs and tournaments of e-sports industry.

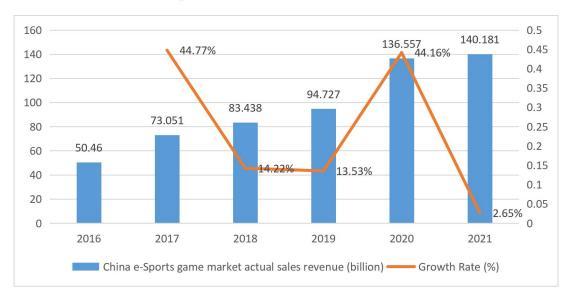


Figure 18. China e-Sports game market actual sales revenue and growth rate

Data source: 2021 China Gaming Industry Report

There is no fixed age limit for e-sports professionals, but it is generally accepted that the prime age for e-sports players is between 16 and 24 years old, a period when people respond more rapidly than other periods. And the talent of a good e-sports player emerges and timely training starts mostly from the age of 14 or even 12. The strengthening of the anti-indulged system regulation is not only a blow to the current e-sports industry but also a huge impact on the training of future e-sports talents. In contrast to the calmness of the game enterprises, the situation in the e-sports industry is embarrassing. The original e-sports youth training system is bound to be significantly adjusted with the strict control of the game time of underage players. Under the new regulation, the e-sports talent training system will have to undergo major changes. Some underage e-sports players have to be removed from the competition list due to the anti-indulged system restrictions.

In conclusion, the second strengthening of the anti-indulged system is not only a further improvement of the game protection mechanism for minors but also a healthy rationalization of the game user structure, promoting the healthy development of the game industry. With the strict restriction on the game hours of underage game users, the share of underage game users in the turnover of game enterprises will be further reduced, but it will not significantly affect the revenue of game enterprises. In contrast, the e-sports industry will be hit more severely.

5.4. Interest-Group Politics Model ?

The distribution of the perceived benefits and costs of government regulation across parents group and game enterprises has changed over the 10+ years that the anti-indulged system has remained unchanged. The perceived benefits of parents for regulation have also gone through a process of change from concentrated to diffused to concentrated, while the perceived costs of game enterprises for regulation have gone through a process of change from concentrated. By this period, the perceived benefits of the parents group for regulation were concentrated and the perceived costs of game enterprises for regulation were also concentrated. According to Wilson' s regulatory politics theory, this period should apply to the interest-group political model.

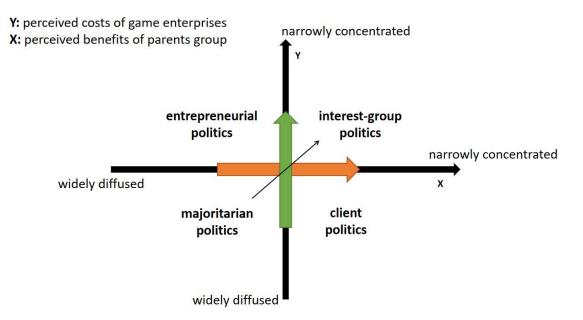


Figure 19. Wilson's Regulatory Politics Model

Nevertheless, we cannot ignore the fact that, unlike in the first period, the government plays a strong role in this period, no longer remaining neutral, but tending to make game enterprises take more social responsibility. Thus, in the theoretical discussions of the first two periods, we can focus our perspective on the two interest groups of parents group and game enterprises, and consider how much the perceived benefits and perceived costs of regulation are dispersed or concentrated in these two specific groups. However, in this period, the organizing power of the two interest groups has limited influence on the formation of the regulation, and policy was no longer the result of a mutual compromise between the two interest groups but was instead led by the government. Therefore, Wilson's interest group politics model can no longer be used to explain well the anti-indulged system regulation in this period.

Unlike the high transparency at the early stage of the formation of the anti-indulged system, both system enhancements in this period did not organize relevant departments, industry organizations, experts, educators, parents, etc. to study together, consult widely, and work out the system standard together, but were directly issued by the State Press and Publication Administration. The government played a strong leading role in the strengthening of the anti-indulged system regulation in this period. Of course, the system would not be strengthened without the strong demand of parents. The interest concerns of the parents group have been actively responded to by the government side, while in contrast, game enterprises are in a more passive position.

With the popularity of smartphones and the development of mobile games, the online game positions of minors have shifted from computers to mobile phones. The focus of regulation should also shift from Internet cafes to mobile games, and the importance of the anti-indulged system has greatly increased. The system will play a bigger and more important role. The problem of young people being addicted to online games has always existed, and the parents group has reflected that the original anti-indulged system standards are too lax, and they hope that Internet enterprises could improve the relevant mechanism and the government could increase supervision. China ' s game industry has steadily developed and entered a mature stage, and the strengthening of the anti-indulged system. Of course, in addition to this, the government has also taken into account that the implementation of some other policies will also require the strengthening of the anti-indulged system.

In March 2021, the Ministry of Education issued the "Notice on Further Strengthening Sleep Management for Primary and Secondary School Students" (also known as the "Sleep Order"). The notice requires that primary school students should get 10 hours of sleep a day, middle school students should get 9 hours, and high school students should get 8 hours. According to the "2019 China Youth and Children Sleep Index White Paper" released by the China Sleep Research Association, the three factors that affect children's sleep are the pressure of schoolwork, playing on mobile phones or computers, and parents' failure to set a good example. The strengthening of the anti-indulged system is also in line with the "Sleep Order" to reduce the number of time children spend playing on their mobile phones to improve their sleep index.

On July 24, 2021, the General Office of the CPC Central Committee and the General Office of the State Council issued the "Opinions on Further Reducing the Burden of Homework and Off-Campus Tutoring for Students in Compulsory Education" (also known as the "double reduction" policy), which calls for reducing the excessive burden of homework and off-campus tutoring for students. The implementation of the "double reduction" policy will allow students to reduce their burden while gaining more free time. To prevent them from over-committing to playing online games during their free time, the strengthening of the anti-indulged system is also a policy tie-in.

Improving the situation of young people's addiction to online games and protecting minors' healthy growth is the basic starting point for the government to improve the game regulation and strengthen the anti-indulged system. However, the first enhancement of the system in 2019 only controlled and reduced the maximum game time, which did not achieve good results. The second enhancement of the system in 2021 still only further reduces the maximum game time based on the first enhancement. Although the effect is not yet known, it may still not be so good.

Some have criticized the government's two enhancements to the anti-indulged system as simply limiting the amount of time spent playing online games, arguing that this is a very lazy approach. C. E. Lindblom argues that public policy is a system of great inertia, and the more serious the error the more difficult it is to fully correct.⁴⁶ Therefore, taking smaller steps in policy-making and correcting problems as they are discovered can avoid the tension and conflict caused at the policy-making level. The Chinese government's strengthening of the anti-indulged system can be seen as a process of adjustment and trial and error. But online game addiction is a very complex problem caused by a variety of factors, and limiting the game time alone is a superficial effort that does not improve the phenomenon of underage addiction to online games. Such simple policy adjustments are cost-effective but lack a clear direction of innovation and change, and it is difficult to promote fundamental policy changes.

There are also some views that the anti-indulged system is originally a superficial job done to cope with parents. On the surface, it seems to prevent minors from being addicted to online games, but in fact, it is to clear the relationship between the game enterprises and the

⁴⁶ Migone, Andrea and Howlett, Michael. 2016. Charles E. Lindblom, "The Science of Muddling Through".

minors and to show parents that the game enterprises have already applied the enhanced anti-indulged system, so any problem of the minors being addicted to online games could not be attributed to the game enterprises again, but only to the minor' s problem and the parents' improper education. Indeed, the government' s enhancement of the anti-indulged system can dissatisfaction. But nearly 20 years have passed since online temporarily alleviate parents' games became popular, and the phenomenon of some teenagers being addicted to online games has always existed. The application of the anti-indulged system in 2007 did not solve the problem, and Internet addiction treatment centers using illegal electroshock therapy emerged. More than a decade later, smartphones became popular, mobile games developed, and parents once again brought the problem of minors' addiction to online games to the government, and this time the reinforcement of the anti-indulged system still did not solve the problem at the root. This cycle will not stop until the problem of minors' addiction to online games is truly solved or the problem is no longer considered a problem.

Chapter 6. Conclusion

At the beginning of the 21st century, China' s online games started to develop, and the scale of the game industry and the number of users continued to rise. The government' s policy on online games, a new industry that emerged along with the Internet economy, has gone through a process from nothing to something. At first, the government had relatively little regulation on online games. But soon, with the influx of minors into online games, some of them became the main victims of "online game addiction", and the protection of minors was paid more attention. The government has introduced a series of online game youth protection policies, the most important, major, and representative one of which is the online game anti-indulged system. The system is a technical means to control the online game time of minors by installing an anti-indulged system in online games, to solve the problem of minors being addicted to online games.

The anti-indulged system was proposed in 2005 and implemented nationwide in 2007. After being extended for more than 10 years, its initial 3-hour healthy game time and 5-hour maximum game time were enhanced in 2019 and 2021, respectively, to significantly reduce the maximum game time. Based on the development process of the anti-indulged system, this study divided it into three periods and discussed them separately in the context of Wilson's regulatory politics model.

The period from 2005 to 2007 was the initial formation of the anti-indulged system. The less organized parents group, with the help of the media, and the more organized game enterprises formed two opposing interest groups. While the government, out of consideration for the actual situation of youth addiction to online games and the general environment of supporting the development of the emerging game industry, maintained a relatively neutral position, regulating the conflict between the game enterprises and parents, and seeking a balance. This gives rise to the interest-group politics model. In this model, the process of forming the regulatory policy of the anti-indulged system has a high degree of transparency, and the policy is the result of a compromise between game enterprises and parents, and there are many loopholes. Game enterprises can easily circumvent the system' s restrictions, while the parents group has difficulty defending their interests due to collective action dilemmas. The fact is that the problem of minors being addicted to online games has not been well solved by the anti-indulged system, and the "Internet addiction treatment center" has become the "savior" of a group of parents who are desperate for help.

The basic content of the anti-indulged system has remained unchanged for 12 years since

it was first implemented nationwide in 2007. During these 10 years or so, the phenomenon of minors being addicted to online games has existed and gradually normalized. As public opinion on online games in society has gradually become better, negative media reports on minors and the Internet no longer cause an uproar in society. The media and society are greatly reduced in their assistance, and the organization of the parents group returns to its original low-level state. At the same time, with the development of smartphones, mobile games are rapidly taking over the game market, but relevant policies are lagging. For the group of game enterprises that bear the cost of regulation, there is a diversion of computer online games and mobile games, making the perceived costs of the regulation relatively diffuse. Wilson 's regulatory politics model applied to regulation shifted from the interest-group politics model to the majoritarian politics model, in which there was no strong incentive for specific interest groups to support or oppose the regulation and the issue of anti-addiction was not reintroduced into the political agenda. The anti-indulged system has been able to maintain stability in this delicate balance.

However, as mobile games continue to develop and integrate into the game industry, the diversion between computer online games and mobile games no longer exists for the group of game enterprises that bear the cost of regulation, making the perceived costs of the regulation shift back to be "concentrated". Similarly, with the popularity of smartphones, mobile games have a wider audience among the underage population and are more likely to be overused due to their fragmented use, making the issue of anti-addiction ripple again. Parents have more channels to reflect the problem to the government, and the power of the parents group coalesces again. The perceived benefits of regulation gradually become concentrated. The perceived costs and benefits of regulation changed and the majoritarian politics model no longer applies. The stability maintained by the anti-indulged system in the balance of the majoritarian politics model can no longer be maintained and changes are ushered in.

By 2019, the anti-indulged system received its first enhanced upgrade. And just a short time later, in 2021, the system was once again enhanced. The government takes a strong role in this period, no longer remaining neutral, but tending to make game enterprises take more social responsibility. The formation of the regulation was dominated by the government, and the organizing power of two interest groups, parents group, and game enterprises, had limited influence on the formation of the regulation. Therefore, we can no longer use Wilson' s interest-group politics model to understand the regulation of the anti-indulged system in this period. Unlike the high transparency in the early stages of the formation of the anti-indulged system, the government played a strong leading role in both enhancements of the system in this period. Looking at the changes in the organizing power of the two interest groups, parents group, and game enterprises, they both have gone through a process from strong to weak to strong again. Along with this process, the anti-indulged system was developed, and enhanced after years of use. The role of the parents group cannot be overlooked. Both major changes, the initial development and the recent enhancement of the anti-indulged system are inseparable from the efforts of parents, whose strong demands have driven the policy agenda. Even though the recent enhancement of the system was strongly led by the government, the role of many parents' feedback on youth online game addiction is still necessary.

Online games have been popular in China for nearly 20 years, and the anti-indulged system was developed and implemented shortly after online games became popular. However, the problem of minors being addicted to online games has not been well solved and has always existed and even worsened after the popularity of mobile games. Since its inception, the mechanics of the anti-indulged system have dictated that it has little effect on minors who are deeply addicted to gaming, and the system can only go so far as to prevent shallowly addicted players from further developing into deeply addicted players. And after the recent strengthening, the mechanism of the system turned into a game-time controller, whose online game time for minors is limited to 3 hours a week, which is indeed strict, but from the effect of the system after the strengthening in 2019, the effect of the re-enforcement in 2021 may still not be so good.

The problem of online game addiction is the reflection of social, economic, and cultural factors on the node of online games, and to a certain extent, it is the deconstruction and reconstruction of traditional values, morality, and life view induced by the modernization process, which is the systematic change of society.⁴⁷ The unscientific school education, the inadequate family education, and the unhealthy social education are all factors that lead to the problem of Internet addiction among minors, not only the problem of the game itself. Since the emergence of the online game addiction problem is caused by many factors, the search for solutions to the problem should necessarily be considered from many aspects. Moreover, before implementing the policy, it is necessary to clearly define the target group of the policy, understand the situation of youths who are addicted to online games, and consider solutions through more effective policy design.⁴⁸ However, for a long time, there has not been a systematic solution to the problem of online game addiction. The one-sided strengthening of the anti-indulged system and the "one-size-fits-all" regulation of game enterprises are not only difficult to play a positive role but even lead to a series of counterproductive effects.

Power should be used with care. This is true of government, and it should also be true of

⁴⁷ 彭桂芳. 2008. 我国网络游戏产业的政府规制研究(1996—2007). 湖北: 华中师范大学.

⁴⁸ 김민석. 2015. 게임 셧다운 정책이 청소년 게임 이용행태에 미치는 영향 연구.

parents for their children. For activities that are less harmful and more accepted and enjoyed by the public, it is appropriate to regulate them carefully rather than rejecting them all. As guardians of their children, parents have a great deal of power over their children. How to balance this power with the freedom of their children has been a problem for several generations of Chinese parents. But there is always someone to pay for the failure of youth education, it used to be martial arts novels⁴⁹, but now it is online games, so what will be the next?

⁴⁹ In the 1980s, martial arts novels were all the rage. It was also criticized by many educational experts, scholars, and parents as a "spiritual opiate" for young people.

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Abstract

21세기 초, 중국의 온라인 게임이 발전하기 시작했고, 게임 산업의 규 모와 사용자 수는 계속해서 증가했다. 온라인 게임은 많은 수의 10대 플레 이어들을 끌어들였고, 일부 미성년자들은 '온라인 게임 중독'의 주요 피해 자가 되었다. 정부가 일련의 온라인 게임 청소년 보호 정책을 도입했는데, 그 중 가장 중요한 것이 온라인 게임 방침미체계이다. 본 연구는 방침미체 계를 연구대상으로 삼고 정부 관료주의에 의해 조정된 이익집단(게임기업 과 미성년자 부모) 정치에 초점을 맞춰 체계의 진화를 분석한다.

본 연구에서는 방침미체계의 진화 과정을 바탕으로 콘텐츠 분석과 프 로세스 추적 방법을 사용하여 윌슨 규제정치 모형 하에서 3개 시기로 구분 하여 논의한다.

체계 공식화 및 시범 운영 기간(2005-2007): 덜 조직화된 부모 집단 은 미디어의 도움으로 더 조직화된 게임 기업들과 두 개의 반대되는 이익 집단을 형성했다. 그리고 정부는 게임 기업과 부모 사이의 갈등을 규제하 기 위해 상대적으로 중립적인 입장을 유지하였고, 이로 인해 이익집단 정 치 모형이 생겨났다. 이 모형에서는 방침미체계의 규제 정책 형성 과정이 매우 투명하고, 이 정책은 허점이 많은 게임업체와 학부모가 타협한 결과 다.

공식 운영 기간(2007-2019): 규제의 인식 비용과 인식된 편익 모두 집중에서 확산, 다시 집중되는 과정을 거쳤다. 규제에 적용된 윌슨의 정치 모형은 우선 이익집단 정치모형에서 특정 이익집단이 규제를 지지하거나 반대할 강력한 동기가 없는 대중 정치모형로 전환했고, 온라인게임 중독 문제는 다시 정치 의제로 올려지지 않았고, 방침미체계는 이런 미묘한 균 형 속에서 안정적으로 유지되고 있다. 그 후 규제에 적용된 윌슨의 정치모 형은 다시 대중 정치모형에서 이익집단 정치모형으로 바뀌었고, 대중 정치 모형의 균형에서 방침미체계에 의해 유지되는 안정성은 더 이상 유지될 수 없었고 변화가 촉진되었다.

더욱 엄격한 규제기간(2019~2021) : 방침미체계는 2019년과 2021년

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에 각각 강화 및 업그레이드된다. 정부는 이 시기에 강력한 역할을 맡았고 더 이상 중립적이지 않다; 윌슨의 규제 정치 모형은 더 이상 적용되지 않 는다. 부모그룹과 게임기업 등 두 이익집단의 조직력은 정부가 주도하는 규제 형성에 미치는 영향력이 제한적이다.

오랫동안, 미성년자들이 온라인 게임에 중독되는 문제는 잘 다루어지 지 않았다. 일방적으로 방침미체계를 강화하고 게임업체에 '일률적인' 규제 를 가하는 것은 긍정적인 역할을 하기 어려울 뿐 아니라 연쇄적인 역효과 까지 낳는다. 온라인 게임 중독 문제 해결에는 사회, 가족, 교육 등의 다양 한 측면을 고려한 보다 효과적인 정책 설계가 필요하다.