

Status and Problems of Online Game Regulations for Juvenile Protection - Centered on the Online Game Shutdown System of Korea

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Abstract

Korea's Compulsive Shutdown System bans online game providers from offering their services to children under 16 years of age from midnight to 6 a.m. Although it was introduced only after lengthy rounds of discussion, controversy over the system still continues. The key question is whether the system, which unilaterally emphasizes juvenile protection, infringes upon the freedom of playing games for teenagers, the freedom of business for game products related business operators and the right to foster children for parents, which are basic rights under the Constitution. It is very encouraging that the State took up the issue and prepared various systems for juvenile protection through the Compulsive Shutdown System. Yet the government has to plan as comprehensive and effective of a measure as it possibly can by predicting the trends of technology development and game use, and also set detailed standards to ensure that the system should not become an excessive or inappropriate regulation. Although the State's compulsive intervention may be positive since it is hard to expect a self purification capability to exhibit itself concerning game use among teenagers, a plan to prevent game addiction among adolescents from the long-term and fundamental perspectives should be prepared as well.

Keywords: Juvenile Protection, Online Game, Shutdown, Constitution, Game Addiction

1. ICT Development, Internet Games and Juvenile Protection

Today the rapid development of information and communication technology (ICT) is bringing sweeping changes to all areas of human life along with greater efficiency of communication between individuals and the internet is leading changes in the overall environment such as the economy, labor, education, culture and leisure sectors while breaking the existing restrictions of time and place. Such development of ICT and the internet contributes to the creation of new industries and culture. A case in point would be the rapid growth of the online gaming industry, with online games accounting for an increasing proportion of cultural and leisure activities. As seen in the development of ICT, however, the growth of online games accompanies both positive and negative aspects, which strongly raises the need for legislative review. On the one hand, online games bring certain positive results, such as establishing a new axis of economic development, creating cultural diversity and offering a means of leisure activity to individuals at an affordable cost. On the other hand, if persons immerse themselves in online gaming this may lead to various social problems, e.g. difficulties in leading a normal social life or a rise in crime related to games. Adverse effects on an individual and social scale and the danger of addiction that may occur from excessive immersion in online games are issues of significance not only for adolescents but adults as well. Yet, it should be recognized as a much more significant issue for immature teenagers whose mental and physical development and education should be ensured.

The need to protect juveniles from online games and game addiction is a common task for countries around the world which have achieved a certain level of ICT development, in which various countermeasures have been explored. And yet, regulations vary depending on the level of social consequence of online games and the situation in each country. Among these nations, Korea boasts a high internet penetration and use rates and is recognized for its excellence in all ICT indicator categories, and has also established itself as one of the top online gaming markets in the world¹. As an inevitable consequence, however, teenagers' immersion in or addiction to online games has emerged as a grave social issue². In response, the Korean National Assembly introduced the Compulsive Shutdown System under the "Juvenile Protection Act," which was enforced starting from November 20, 2011. Korea's Compulsive Shutdown System bans online game providers from offering their services to children under 16 years of age from midnight to 6 a.m. The system is aimed at providing an environment suited to the growth and education of juveniles by preventing game addiction [1] and ensuring proper sleep hours. Although it was introduced only after lengthy rounds of discussion, controversy over the system still continues³. The key question is whether the system, which unilaterally emphasizes juvenile protection, infringes upon the freedom of playing games for teenagers, the freedom of business for game products related business operators and the right

¹ According to the ICT Development Index released by the ITU (International Telecommunication Union) in September 2011, Korea was ranked No.1 among the 152 surveyed countries, for the second consecutive year. In April 2012, DFC Intelligence, a strategic market research firm, forecast that the Korean online gaming market would reach 5 billion dollars by 2016.

² CNN reported a story of internet game addiction in Korea and relevant incidents on March 26, 2010 and broadcast the dark side of the gaming powerhouse as the first episode of the special program "Game Reality" which covered the impact of games on daily life on August 7, 2012.

³ Currently, the Constitutional Court is deliberating on whether the provision of the Juvenile Protection Act that prescribes the System enforced on November 20, 2011 is unconstitutional, since Cultural Action and the Korean Association of Game Industry filed constitutional appeals against it, respectively.

to foster children for parents, which are basic rights under the Constitution.

2. Significance and Characteristics of Online Games

2.1. Significance of Online Games

Games can be divided into two categories: online games, where a player has access to the network to play games, and offline games, where a player only uses the programs embedded to machines. Online games refer to those which can be used via an internet connection, regardless of device types, the number of users, wired or wireless connections. Meanwhile, the law must be as clear as possible in determining the subjects of regulation. The definitions of online games can be identified in three related Korean laws. First, the Game Industry Promotion Act defines “game products” as “video products produced so that one may play a game by making use of data processing technology, such as computer programs, or similar, or a mechanical device for making good use of leisure time, raising the effect of learning and physical exercise incidental thereto, or apparatus and devices produced for the main purpose of using such video products (Subparagraph 1 of Article 2). Second, the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc. (hereinafter referred to as the “Act on Promotion of Information and Communications Network”) defines the “information and communications network” as “an information and communications system for collecting, processing, storing, searching, transmitting or receiving information by means of telecommunications facilities and equipment, or by utilizing computers and applied computer technology along with such telecommunications facilities and equipment (Subparagraph 1 of Paragraph 1 of Article 2). And third, the Juvenile Protection Act in question defines online games as game products “provided in real time” through the “information and communications network” prescribed by the Act on Promotion of Information and Communications Network among “game products” of the Game Industry Promotion Act (Paragraph 1 of Article 23-3). Although the Juvenile Protection Act does not provide a direct explanation as to what online games are, the meaning of online games which are subject to regulation can be identified to a relatively clear extent by referring to related provisions within the Game Industry Promotion Act and the Act on Promotion of Information and Communications Network.

2.2. Characteristics of Online Games

All games using computer programs serve as very convenient means of entertainment in that they can be enjoyed indoors without restriction by the external environment and they require but simple operation. As games are considered to be successful when they stimulate continued interest, offline and online games are characterized by easy access and immersion. Yet, in the case of online games, players can meet one to one or in group and build a community available 24/7 in the virtual space, even if they have never personally seen each other offline. Under these conditions, they can continue to cooperate and compete with each other to achieve a common goal and exchange their ideas and information while playing games. And also, game users can create a second self in a new world filled with a sense of tension, which keeps unfolding in the environment being provided in real time through online, not a given program⁴.

⁴ The Simulation Prison Experiment conducted by Philip Zimbardo at Stanford University in 1971 showed that if a specific role is given to each person in a defined situation, it would have a great impact on individual behaviors even in a virtual situation. This means that if a role that a community has given to an individual is combined with a situational context, a new identity can be created for the individual. That is, a community, which is the basis of

In particular, Massive Multiplayer Online Role Playing Games (MMORPG) allow gamers to create a random story by themselves and evolve a virtual community, instead of following a story created by game developers. In addition, since the structure of games requires users to reach a certain level before allowing their character to engage in the game actively, gamers must invest an enormous amount of time in nurturing a character and securing various items. Although games themselves have the property of leading to a certain level of immersion by stimulating interest, online games with the above characteristics are especially addictive. In particular, internet games pose a fatal temptation to adolescents who face various behavioral restrictions in the real world compared to adults [2], want to belong to a peer group, are relatively more afraid of being shunned by the group and can hardly be expected to make rational decisions and actions by clearly separating the real world from the virtual world.

3. Status of Global Online Game Regulations by Country

3.1 U.S.

The Entertainment Software Rating Board (ESRB), established in 1994 as a rating board on game products, has a system in place to allow the searching of ratings of game products online and which provides information about games harmful to adolescents. And yet, compared to other countries, internet games have caused comparatively little damage in the U.S.⁵, and as a result it is private organizations such as parents' associations, colleges and private associations which are leading and actively engaging in activities to prevent and remedy internet addiction. The Center for On-Line Addiction, established in 1995 by Dr. Kimberly Young at the University of Pittsburgh, developed a scale to diagnose internet addiction called "Young Scale [3]," for the first time in the world in 1998 and has been offering various information and services to prevent and treat internet addiction on and offline [4]. America's internet addiction treatment centers are offering services for a variety of addictions, related to such areas as pornography, sex transaction, gambling, gaming, internet searching and eBay auction. Among these, the website addictionsearch.com offers information related to various behavioral addictions and operates a helpline at all times. Besides, the parents of the National Institution of Media and the Family, a parents' community, review if videos, computer game products, etc. are harmful to children and independently offer related information. The Computer Addiction Service at Harvard Medical School offers internet addiction recovery services, such as internet addiction prevention education to individuals and office workers, consulting programs to companies and prevention projects to schools. The Illinois Institute for Addiction Recovery supports the development and supply of treatment programs for internet, gambling and sex addictions, education projects, etc. The internet addiction treatment center of Heavensfield Retreat Center opened in Fall City, near Seattle, in July 2009. The center is built on 5 acres of land and adopts a treatment method of blocking all addiction subjects at once. The center operates the ReSTART Internet Addiction Recovery Program [5], which is a program to intensively manage and treat game, internet, text message and chatting addictions for 45 days. Those checking in the center would experience an internet-free daily life filled

forming a group identity, becomes a precondition for an individual to realize a personal identity. Therefore, if a new group identity can be formed in a new environment, a new personal identity can also be formed based on that.

⁵ Meanwhile, although it is not a case related to internet games, the Supreme Court of the United States ruled 7-2 on June 27, 2011 that a California law to ban the sale or renting of violent video games to adolescents aged under 18 is unconstitutional. The California law to ban adolescents from accessing violent games is an unconstitutional regulation because there is no clear connection between violent games and aggressive behaviors. *Brown v. Entertainment Merchants Association*, 564 U. S. No. 08-1448 (2011)

with various activities such as household chores, gardening, walking, exercising and cooking while receiving counseling and psychological treatment [6].

3.2 U.K.

As the EU country most interested in the safe internet use of children and adolescents, the U.K. stresses mutually cooperative relations between government regulatory agencies and private self-regulatory bodies. In particular, the nation established the Child Exploitation and Online Protection Centre (CEOP)⁶ and the National Addiction Centre (NAC), which are in charge of affairs related to internet addiction, to encourage adolescents to use the internet in a proper way. The country also operates a specialized website to cope with potential addiction risks of interactive services, such as chatting room, instant messaging, online games, e-mail, mobile and messenger. The Computer Rehab Clinic, the first of its kind in Britain, opened to treat computer game addicts in November 2009 [6].

3.3 Japan

Recently, with the number of “Hikikomori” growing due to internet addiction, etc., Japan is facing serious social issues such as violence and abandonment of academic and economic activities. The issue of adolescents spending too much money on playing mobile games on their smart phones has become a significant one. In response, Japan’s provincial governments are engaging in various activities, such as operating an internet addiction information center to cope with internet addiction, publishing a pamphlet to prevent the damage resulting from unfair billing practices by fee-based websites (Gifu) and manufacturing and distributing educational materials on information ethics for healthy use of the internet and cell phones (Kumamoto). In addition, the country operates two addiction information centers offering internet addiction counseling services in Osaka and Tsukuba. Tokyo revised the Ordinance for the Healthy Growth of Youth in July 2007 and required cell phone sales stores, etc. to encourage purchasers to use filtering services, etc. to restrict adolescents from accessing harmful websites at home. In regard to adolescents spending too much money on games, the gaming industry came up with a tougher self-regulatory policy to limit the amount of monthly payment; 5,000 yen for those aged under 15 and 10,000 yen for those aged under 19. Meanwhile, in May 2012, the Pharmaceutical Medical Device Agency (PMDA) demanded that the social network gaming industry should stop selling products that cause speculation, i.e. so-called “jackpot items,” which violate stipulations⁷ under the Unfair Gifts and Unfair Indications Prevention Law, etc. In response, GREE, the representative mobile SNG company in Japan, announced it was preparing a “proper use of social games” as part of its self-regulation. The company announced it would form an “internal user environment improvement committee” to promote a proper use of games and improve services, organize an advisory committee to review problem-solving ideas and implement self-regulatory measures, such as adjustment of the payment ceiling for minors, monitoring of illegal transactions and improvement of distribution environment and customer management methods [6].

⁶ The CEOP, established as a government agency in 2006, engages in activities to block a possibility of getting addicted to games by educating children on the right way of using the internet. For more information, visit <http://ceop.police.uk/>

⁷ The item that became a social issue is “compu gacha,” which began being distributed in Japan in 2011. As an item resembling to gambling, it ensures that rare items are exchanged for completing certain pre-determined sets of items.

3.4 China

China is coping with internet addiction and game addiction through regulation at the national level. Beijing limits the use and provision of internet games through the Ordinance on Security Management and Punishment, the Criminal Law, the Act on Internet Information Service Management, and the Publication Management Ordinance, among others. Recently, the country banned the approval of internet PC cafes and toughened its crackdown on the operation of illegal internet PC cafes and whether to check the identity of users. Also, China came up with a regulation of banning teenagers' access to internet cafes through a stricter regulation of internet use for teens, which requires internet cafes to install a program to restrict the time of playing computer games to under five hours. With internet game addiction among adolescents emerging as a social issue⁸, the Ministry of Culture has been implementing a project for parental supervision of minors using internet games since March 1, 2012, as well as the Online Game Fatigue System, introduced in 2011. Under the project, parents can control their children's access to games through procedures required by internet game operators. By submitting certificates that they are the persons with parental rights and game titles and IDs to internet game operators, parents can limit the playing time of their children or ban their access to the games through game companies [6].

3.5 Thailand

With the popularity of internet games leading to the social issue of internet game addiction among adolescents, Thailand implemented the "Shutdown System," which bans adolescents aged under 18 from using internet games from 10 p.m. to 6 a.m., starting from July 2003⁹. Yet, the system is not required by law but just a governmental recommendation where the government presents a guideline demanding that game companies should implement the Shutdown System and then, those for who agree with the system, to self-regulate game access time based on total amounts. However, the Shutdown System has not been effective since it was difficult for game companies to implement user authentication, while adolescents easily used the identification of other people to access games. As a result, the system came under criticism that the measure remains in name only. Currently, instead of a regulation policy of blocking game servers, the Thai government takes a policy of banning adolescents' access to internet cafes after 10 p.m.¹⁰

3.6 Vietnam

Recognizing the seriousness of internet game addiction among adolescents¹¹, the Vietnamese government has come up with various policies. The city of Hanoi carried out massive

⁸ According to a survey by the Chinese Academy of Social Sciences (CASS), 33 million (14%) of 236 million internet users aged under 29 were classified as internet addicts who spend over 90 minutes a day on the internet except for working hours and around 68% of internet addicts were found to be immersed in video games, especially role playing games (http://www.chinadaily.com.cn/china/2010-06/19/content_9992063.htm). And the China Youth Association for Network Development (CYAND) said in the "Report on internet addiction among adolescents for 2009" that the number of internet addicts among young internet users living in cities is 18.585 million (12.7%) and looking at the ages of internet addicts, those aged 18-23 was ranked first with 15.6%, followed by those aged 24-29 with 14.6% and those aged 13-17 with 14.3% (http://www.tudou.com/home/diary_v2331319.html).

⁹ According to this system, even adults are required to bring their ID card and photo to a post office to have their age checked and then the post office sends the information to internet game companies, which in turn give applicants a new ID and Password so that they can use internet games after 10 p.m.

¹⁰ For the history of Thai internet game regulations, visit <http://www.gamepolitics.com/category/topics/thailand>

¹¹ According to a survey of 370,390 students enrolled at 1,120 schools across the nation by the Ministry of

crackdown on internet cafes—the main places where teenagers enjoy internet games—by leading them to close the cafes through the cutoff of internet service for 204 internet cafes located within the 200m distance from schools. The city also ordered internet cafes to block internet game service from 10 p.m. to 8 a.m. starting from March 2011 [7]. In addition, it required all educational institutions from primary schools to colleges to install opinion boxes to gather various opinions to prevent internet game addiction among students and identify the status, and separately from internet game regulation on teenagers, the country obliged school personnel and teachers to stop playing internet games, especially those encouraging violence and sexuality.

4. Status of Korean Online Game Regulation for Juvenile Protection

4.1 Korean Laws Related to Juvenile Protection

The Korean Constitution does not directly define juvenile protection and only stipulates in Paragraph 4 of Article 34 that “The State has the duty to implement policies for enhancing the welfare of senior citizens and the young.” Laws concerning juveniles are basically classified into two directions: juvenile fostering and juvenile protection. The Framework Act on Juveniles and the Juvenile Protection Act are the most fundamental laws concerning the former and latter, respectively¹². Yet, the Framework Act on Juveniles does not include direct regulations for juvenile protection since it is mainly focused on policies that support the government and local autonomous governments to foster juveniles, improve juvenile welfare and promote juvenile activities. All kinds of regulation for juvenile protection are based on the Juvenile Protection Act, whose enforcement lies under the jurisdiction of the Ministry of Gender Equality and Family. The purpose of this Act is to regulate the distribution of harmful media materials, drugs, etc. among juveniles and their access to harmful entertainment establishments, and protect them from harmful environments. The Act defines a juvenile as any person below full 19 years of age, and specifically defines the meaning of materials harmful to juveniles, drugs harmful to juveniles and entertainment establishments harmful to juveniles. Also, the Act prescribes such obligations as indications of being harmful to juveniles, prohibition of selling to juveniles and prohibition of employing juveniles and giving them access, and also stipulates fines for negligence and punishment in case of a violation¹³. Besides this, special provisions for juvenile protection are divided among various areas of law. In regard to games, the Game Industry Promotion Act serves as the leading basis for regulation.

Education and Training, 82% of respondents were found to use internet games at internet cafes 1 to 6 times a week. 14% of them used internet cafes 8 times a week and 3.4% over 10 times a week. The time spent on internet games every visit to internet cafes was 2 to 3 hours, on average, and 5.9% of respondents spent 4 to 7 hours and 0.5% (1,745 students) over 8 hours. And 7.9% responded that they enjoyed internet games after 10 p.m. <http://talkvietnam.com/2010/12/survey-says-over-70-of-school-students-play-online-games/>

¹² Besides, there is the Act on the Protection of Children and Juveniles from Sexual Abuse which prescribes special provisions on the punishment and procedures of sexual crimes against children and juveniles and prepares for the procedures to help and support child and adolescent victims.

¹³ In particular, protection measures should be taken against media materials harmful to juveniles, such as packaging and the same level of measure as packing, and broadcasting of such materials shall be prohibited during hours as prescribed by Presidential Decree. The Enforcement Decree of the Juvenile Protection Act defines in Paragraph 1 of Article 19 that the broadcasting hours for juvenile protection shall be 7 a.m. - 9 a.m. and 1 p.m. - 10 p.m. on weekdays, and 7 a.m. - 10 p.m. on weekends and holidays and during vacations of primary, middle and high schools.

4.2 Online Game Regulation System for Juvenile Protection

4.2.1 Online Game Rating System

The Juvenile Protection Act defines that with regard to media materials identified as not being harmful to juveniles as a result of a deliberation by the Juvenile Protection Committee, the Committee may rate the media materials in quest through deliberation, and the ages of juveniles utilizing them (Paragraph 1 of Article 8) and game products are considered as “media materials” under the Act. Yet, rating classifications of game products apply to the Game Industry Promotion Act. The Game Industry Promotion Act prescribes that a person who intends to produce or distribute a game product for the purpose of circulating a game product or providing for the use thereof shall receive a rating on the contents of the game product concerned from the Game Rating Board before production or distribution of the game product concerned (Paragraph 1 of Article 21), and the rating classifications of game products shall be as follows: Game products which may be used by anyone; Game products which may not be used by those aged under 12; Game products which may not be used by those aged under 15; and Game products which may not be used by juveniles (Paragraph 2 of Article 21). The Minister of Culture, Sports and Tourism, heads of local autonomous governments shall remove, destroy or delete unclassified game products or the contents of which are different from the classification obtained (Paragraph 3 of Article 38). In cases where a person distributes, provides for use, displays or stores unclassified game products or the contents of which are different from the classification obtained and a person provides for use in violation of the classification obtained, they shall be sentenced to imprisonment or other forms of punishment.

4.2.2 Prevention Measures of Game Immersion and Addiction

The Game Industry Promotion Act defines the measures that business operators in the field of game products must take to prevent game immersion and addiction of users (Paragraph 1 of Article 12-3). And game products related business operators shall submit data related to prevention measures upon the request of the Minister of Culture, Sports and Tourism (Paragraph 4 of Article 12-3), while the Minister of Culture, Sports and Tourism has the authority to issue a correction order if he/she considers that prevention measures are not sufficient after reviewing the data (Paragraph 5 of Article 12-3). A person who fails to follow the request of data submission by the Minister of Culture, Sports and Tourism shall be punished by a fine not exceeding 10 million won (Subparagraph 1 of Article 45) and a person who fails to follow the correctional order of the Minister of Culture, Sports and Tourism shall be punished by imprisonment for not more than two years or by a fine not exceeding 20 million won (Subparagraph 1 of Paragraph 1 of Article 48). Business operators who deal in game products are required to take the following measures: 1. Check the real name and age and implement user authentication when users of game products sign up for a membership; 2. Secure the consent of legal representatives including a person of parental authority when juveniles sign up for a membership; 3. Limit the method and time of using game products upon the request of juveniles or their legal representatives; 4. Notify juveniles and their legal representatives of basic matters concerning the characteristics, ratings, fee-based policy of game products offered and the details concerning the use of game products, such as the times spent on game products and payment information; 5. Post a caution notice to prevent the excessive use of game products; 6. Display the time spent on game products on the screen; and, 7. Other matters prescribed by Presidential Decree to prevent the excessive use of game products. Although the above measures are not limitedly applied to adolescents, they include

measures to prevent game addiction among juveniles. In particular, the “Selection System of Game Available Time” or the “Selective Shutdown System” was introduced to ensure that game providers restrict the time of using game products upon the request of legal representatives.

4.2.3 Compulsive Shutdown System

Regarding anti-internet game addiction among adolescents, the Juvenile Protection Act defines that internet game providers are required to gain the consent of a person of parental authority, etc. when young students aged under 16 sign up for membership (Article 24), and notify a person of parental authority, etc. of basic matters concerning the characteristics, ratings and fee-based policy, etc., about the time spent on internet games and payment information about online game use (Article 25) and shut down online games during late night time periods (Article 26). The Shutdown System requires internet game providers to restrict young students aged under 16 from using online games from midnight to 6 a.m. A person who violates the Shutdown System during late night time periods (hereinafter referred to as the “Compulsive Shutdown System”) shall be punished by imprisonment for no more than two years, or by a fine not exceeding 10 million won. The system is referred to as the “Cinderella Law” in that online games are shut down at midnight, and also as the “Compulsive Shutdown System” in that the playing time is restricted regardless of the request of juveniles or their legal representatives.

4.3 Constitutional Problems of the Shutdown System

The systems of directly restricting juveniles from using internet games, among internet game regulations in Korea, include the Selective Shutdown System prescribed by the Game Industry Promotion Act and the Compulsive Shutdown System stipulated by the Juvenile Protection Act. Yet, as for the former system, it can be said that it does not have a significant impact on the protection of basic rights of teenagers and their legal representatives in that it is a selective system where the use of internet games is restricted only when teenagers or their legal representatives make such a request. On the other hand, the latter system, which compulsively shuts down internet games during late night time periods, causes constitutional controversy by greatly impacting the basic rights of three actors—namely, the teenagers, their legal representatives and internet game-related business operators¹⁴. As the Juvenile Protection Act defines in Paragraph 1 of Article 23-3 that online game related business operators shall restrict children aged under 16 from using internet games from midnight to 6 a.m., its primary regulation target is internet game providers. And yet, such measures against internet game providers directly leads to a situation where children aged under 16 are unable to play online games from midnight to 6 a.m. and the legal representatives’ right to control the internet game use of protected children is restricted. On balance, the Compulsive Shutdown System simultaneously restricts the right to foster children for legal representatives¹⁵ who want to

¹⁴ A revision bill of the Juvenile Protection Act, including the Compulsive Shutdown System, was initiated in the 17th National Assembly in 2005. However it was scrapped with the end of the term of the 17th National Assembly. After that, another bill was introduced in the 18th National Assembly in 2008. It was passed only after two years of discussion and consultation with related departments by lowering the applicable age from 19 to 16 years of age. And yet, even until today when over a year has passed since it was enforced, a controversy concerning that is still going on. And in regard to the provision of the Compulsive Shutdown System under the Juvenile Protection Act, a lawsuit was raised to the Korean Constitutional Court based on that it infringes upon basic rights, and the Court is deliberating on that issue.

¹⁵ The Korean Constitution does not have a provision on parents’ right to foster children. However, the Constitutional Court said that parents’ right to foster children is an inviolable human right that all humans should

make autonomous decisions on the fostering of protected children and the freedom of business for internet game providers¹⁶, as well as the right to play games for children¹⁷, by compulsively prohibiting the provision of internet games. And whether such restrictions are too excessive becomes a critical constitutional issue. Whether the State's measures to restrict basic rights are excessive and unconstitutional will be determined by the "principle of the prohibition of excessive restriction." And the "principle of the prohibition of excessive restriction" requires the following: legitimacy of purpose, appropriateness of means, minimum restriction of private interests, and proportionality between the public interest to be achieved and the private interest to be restricted. Now, this paper will first summarize the Korean situation concerning online games and then examine whether the Compulsive Shutdown System excessively restricts basic rights.

5. Whether the Shutdown System Excessively Restricts Basic Rights

5.1 Korea's Situation concerning Online Games

When it comes to online games in Korea, the situation can be summed up as follows: online game addiction among teenagers is serious, and the domestic gaming industry is very passive in taking self-regulatory measures when they are achieving record operating profits.

First, according to a fact-finding survey of internet addiction by the National Information Society Agency (NIA) in 2011, the internet addiction rate of teenagers aged between 10 and 19, including potential risk and high risk groups, stood at 22.4%, a high figure compared to 14.0% of adults. The main objective of internet use for internet addicts was to play online games. 69.4% of children aged between 5 and 10 and 54.0% of teenagers aged between 10 and 19 answered that their main objective of internet use is to play online games, a fairly high figure compared to 23.8% of adults. In particular, this survey found that as for a high risk group of young children, 100% responded that the main objective to access the internet is to play online games [8].

Meanwhile, according to a white paper on gaming released by the Korea Creative Content Agency (KOCCA) in 2011, 44.1% of teenagers aged between 15 and 19 selected games as their favorite leisure activity¹⁸ and their average playing time was almost two hours at one go and 91.3% of young students aged between 9 and 14 continuously play games. Also, the age of

enjoy regardless of their nationality, and recognized it as a basic right based on provisions ensuring the autonomous scope of family, including Paragraph 1 of Article 36 (Marriage and family life shall be entered into and sustained on the basis of individual dignity and equality of the sexes, and the State shall do everything in its power to achieve that goal.), Article 10 (All citizens shall be assured of human worth and dignity and have the right to pursue happiness.) and Paragraph 1 of Article 37 (Freedoms and rights of citizens shall not be neglected on the grounds that they are not enumerated in the Constitution.). Constitutional Court, 98 Hun-Ga 16, April 27, 2000

¹⁶ The Korean Constitution prescribes in Article 15 that all citizens shall enjoy freedom of occupation. The freedom of occupation means a comprehensive freedom including the freedom to select and practice an occupation and change the occupation at their will.

¹⁷ Juveniles' right to play games is not a basic right directly guaranteed by the Constitution. And yet, the right to pursue happiness pursuant to Article 10 of the Constitution guarantees the freedom of behavior or the expression of personality, and the protection scope includes the matters concerning individuals' way of life and hobby. Therefore, despite the risk of game addiction and various problems stemming from the addiction, the right to play games is recognized as a basic right based on the right to pursue happiness pursuant to Article 10 of the Constitution.

¹⁸ It is a global trend that males are more likely to use the internet to play games than females. (Kennedy, T., Wellman, B. & Klement, K. Gendering the digital divide, IT & Society Vol.1, 2003, p.72-96) A survey by the Korea Creative Contents Agency also found that regarding the ratio of games to their leisure activities, males (43.6%) showed over twice as much as that of females (16.9%).

playing computer games for the first time was 14.3, on average, and 67.1% of the respondents selected “online games” as their favorite games, followed by “mobile games” (15.3%) and “PC games” (8.6%). It is also noticeable that the use of mobile games has rapidly increased from 8.4% in 2010 to 15.3% in 2011. In particular, as for teenagers between 15 and 19, 76.4% selected online games as their favorite games, showing the highest concentration level. A survey of the time periods when they were using games showed that adolescents mostly play games during late night time periods. 10.2% of those aged between 9 and 14 and 18.0% of those aged between 15 and 19 play games during the time period of between 10 p.m. and 6 a.m. As mentioned above, the seriousness of internet game addiction is actually contributing to the rapid growth of the domestic gaming market. According to KOCCA, in regard to sales, the domestic gaming market for 2011 reached 6.397 billion dollars, up 18.5% year-on-year, accounting for 5.9% of the global gaming market (108.113 billion dollars). In particular, the online gaming market accounts for 70.8% of the domestic gaming market and Korean online games make up 27% of the global market, ranking second after China (32.3%). The domestic gaming market has grown approximately tenfold over the last decade due to the government’s policy to promote the gaming industry. However, despite such rapid growth, very few measures to prevent game addiction, the side-effect of online games, have been taken. Only recently has the seriousness of game addiction been recognized and regulations to prevent adolescents from game addiction are now beginning to be discussed and introduced. As for the gaming industry, it only began making self-regulatory efforts after the Shutdown System was discussed in earnest on political platforms. In 2009, the Ministry of Culture, Sports and Tourism recommended for the gaming industry to self-regulate an online game available time for adolescents before enforcing the regulation. In response, the Korean Association of Game Industry seemed to have shown its will to practice it through the “Green Game Campaign¹⁹,” but ultimately failed to follow through due to a low participation of game companies. Against this backdrop, the need for the Compulsive Shutdown System is all the more growing in that it is hard to expect parents, who are not accustomed to using the computer and the internet, to actively intervene in preventing game addiction among children, and that in a country characterized by a low fertility rate and rapidly becoming a super-aged society²⁰, the protection and healthy growth of youth should be understood as a means of securing human resources in the name of national interest.

5.2 Purposes of the Shutdown System

The Compulsive Shutdown System is aimed at preventing game addiction among adolescents and ensuring a minimum amount of sleep time necessary for their growth and learning. In particular, as for students aged under 16, who are at a critical development stage mentally and physically, there is a significant meaning associated with creating an environment for their balanced growth and development and also there is a great need for external protection measures since they are still immature from the aspect of self-control or a sense of responsibility. In cases where teenagers aged under 16 continue playing internet games until late at night, there is a great risk of their becoming addicted to online games and failing to

¹⁹ Green Game Campaign is to protect juveniles, prevent illegal acts/wrongdoing and speculative acts and promote functional games while championing for a healthy, right and learning gaming culture. Its homepage is <http://www.greengame.or.kr/>

²⁰ According to a report by UN Population Fund (UNFPA), Korea’s fertility rate stood at 1.4, the lowest in the world (UNFPA, State of World Population 2012 Report, 2012, P.112) and Statistics Korea forecast that the ratio of senior citizens aged over 65 would increase from 11% in 2010, to 14% (entering into an aged society) in 2018 and to 21% (entering into a super-aged society) in 2025.

secure a proper amount of sleep time. Accordingly, in the short term, this would have a significant impact on their daily life and education activities [9] and also it would be hard to expect healthy physical growth [10] and normal relationship with others [11]. In the long term, excessive online game use among young children under the age of 16 would increase the probability of getting addicted to internet games when they become high teens and adults, greatly affecting their normal social lives in the future [12]. Furthermore, internet game addiction among adolescents causes damage not only to the young addicts themselves but to their homes, where a conflict may be caused between parents who want to exercise their right to educate children about internet games and children, leading to an irrevocable extent of domestic conflict. In addition, it can increase the risk of related youth crime, decrease their capability to adapt to educational courses at school, even leading to dropout. Eventually, it would cause difficulties in securing human resources necessary for the nation's continued development [13].²¹ In other words, as internet game addiction among may impose a burden on society and the nation in various aspects, the Compulsive Shutdown System is aimed at preventing online game addiction among teenagers and to proactively prevent negative consequences stemming from this [14].²²

Meanwhile, the Korean Constitution defines that the State has the duty to implement special measure for juvenile protection, while also stipulating "The State has the duty to implement policies for enhancing the welfare of.....the young" in Paragraph 4 of Article 34 and "Special protection has to be accorded to working children" in Paragraph 5 of Article 32. Therefore, the State's duty to plan and implement policies to promote the healthy growth of adolescents originates from the Constitution²³ and the Compulsive Shutdown System becomes an important means to implement the constitutional duty. Furthermore, the Constitution defines in Paragraph 1 of Article 31 that all citizens shall have an equal right to education and the State has the duty to prepare human and physical resources for education and improve the educational environment. If children aged under 16 continue to play internet games until late at night, they are deprived of sleep, which makes it hard to receive regular school education. In addition, due to a sense of anxiety and dependence, the typical symptoms of internet game addiction, teenagers are unable to adapt to regular educational courses. If the situation continues, they cannot properly engage in education activities at school. Therefore, with the aim of creating an environment where teenagers can receive education by securing a proper sleep time for those under the age of 16 to take a rest for psychological and physical stability, the Compulsive Shutdown System is a means to perform the State's duty to guarantee the right to receive education. On balance, the Compulsive Shutdown System has the basic purposes of creating an environment where teenagers can grow into sound and healthy human beings and receive education by preventing those under the age of 16 from

²¹ Although there is a limit to connect the issues of juvenile education and national human resources to academic records, most studies on the connection between game addiction and school records conclude that game addiction has a negative impact on academic records.

²² As mentioned in footnote 9 citing the U.S. Supreme Court's *Brown v. Entertainment Merchants Association* case, banning the sales of violent games should be considered as unconstitutional. Some argue that it is an excessive regulation to ban the provision of games evaluated as being harmless to juveniles. (). However, it is not appropriate to quote the California law being subjected to the decision of the U.S. Supreme Court since the legislative purpose of the law is different from that of the Compulsive Shutdown System under the Korean Juvenile Protection Act.

²³ Even in the United States where there is no provision on juveniles under the Federal Constitution, juvenile protection is recognized as an important national interest based on the fact that juveniles should be protected to grow into a free and independent human being since they are still immature, and discriminating juveniles from adults is also recognized as reasonable. *Ginsberg vs New York*, 390 U.S. 629, 637, 640-41 (1968); *Free Speech Coalition v. Reno*, 495 U.S. 103 (1989)

getting addicted to internet games and ensuring a proper sleep time, and blocking all kinds of social risks caused by internet game addiction among juveniles. Such purposes are considered to be legitimate.

5.3 Possibility to Achieve the Purposes through the Compulsive Shutdown System: Appropriateness of Means

The most appropriate means to prevent all forms of addictions, including game addiction, is to continuously block access to the element which is the cause of addiction. If we restrict adolescents from playing online games through the Compulsive Shutdown System, we can block juveniles from using internet games on a continuous basis. And the Compulsive Shutdown System becomes an appropriate means to contribute to achieving the basic purpose of preventing game addiction among teenagers. And yet, the question remains as to whether implementing a shutdown on online games for certain time windows, or restricting a total amount of playing time, is the more effective in preventing game addiction and preventing adolescents from evading regulations in various ways. Another question is whether the Compulsive Shutdown System is an actually effective and appropriate means in this regard.

5.3.1 Compulsive Shutdown System and Possibility to Prevent Game Addiction

First, the Juvenile Protection Act defines the concept of internet game addiction as “Internet game users suffer the physical, psychological and social damage which cannot be easily recovered due to excessive use of internet games,” in Paragraph 1 of Article 23-4. The former issue can be raised in relation to the interpretation of “excessive use.” If a person limitedly interprets “excessive use” as long-time use, the issue of internet game addiction can be identified as one of how long games are played. According to such an interpretation, internet game addiction is not directly related to the time at which games are played. And so, if a person does not play internet games for a long time, even if playing games late at night, it would not be an addiction. And if a person plays games for a long time even if playing games during the allowed time periods, it would be an addiction. Therefore, for the purpose of preventing internet game addiction, it would be appropriate to block games if a certain amount of time goes by. Game shutdown for specified time periods, as imposed under the current Compulsive Shutdown System, may be seen as a measure lacking in appropriateness of means.

However, “excessive use” is not just determined by the amount of playing time. In a broad sense, it includes internet game use exceeding the allowable level from a general point of view. That is, playing internet games until late at night when most people are asleep may be considered as excessive use²⁴. Playing games late at night may indicate a high risk of future addiction or an already existing addiction. From the aspect of the amount of playing time, the effectiveness of restricting the amount of playing time from midnight to 6 a.m. is sufficient in that adolescents aged under 16 can play internet games only after finishing their lessons at school and private educational institutes. In addition, the late night time periods from midnight to 6 a.m., compared to the night times from sunset to sunrise and daytime periods, make people more sensitive, i.e. more likely to lose self-control and lead to deterioration of the brain and

²⁴ Considering that internet game addicts are highly likely to play internet games during late night time periods, the enforcement of the Compulsive Shutdown System can ensure proper sleep hours for at least 40% of internet addicts of juveniles aged under 16. Hae Kook Lee and others, A cost-benefit analysis on the introduction of the Online Game Shutdown System (centered on a study on social cost estimation of internet addiction), Ministry of Gender Equality and Family, January 2011, p. 42

body the most. Accordingly, playing internet games during the late night time periods further increases the risk of becoming addicted to games and on the other hand, playing games through the late time periods is indicative of already existing addiction to games. In the end, the key to anti-internet game addiction is to prevent teenagers' tolerance to interest and stimulation by compulsively blocking continuous internet game use in any ways necessary. And considering the risk of game addiction and the characteristics of late night times affecting the youth's health, the Compulsive Shutdown System secures its appropriateness as a means to create an environment for the sound and healthy growth and educational activities of adolescents by preventing internet game addiction and ensuring a proper amount of sleep time.

5.3.2 Regulation Avoidance and Possibility to Prevent Game Addiction

A question is being raised that the Compulsive Shutdown System is not appropriate as a means to prevent game addiction from the aspect of effectiveness [15]. Adolescents are likely to steal or use the identification of their parents or siblings over the age of 16 and highly likely to transfer their interest to other objects to immerse themselves in. Therefore, the objection claims, the Compulsive Shutdown System is not appropriate as a means of regulation.

Yet, the issue of playing games using the identification of another person is one that has already been raised regardless of the Compulsive Shutdown System. Such problems, rather, increase the need to thoroughly implement identity authentication and age verification for internet game users and thus it is hard to argue for this as the basis of foregoing regulation. This is akin to arguing that just because minors can evade the regulation by using the identification of other persons to access internet games, the game rating system or the regulation of restricting adolescents from accessing adult-only websites is inappropriate as a means to protect juveniles. And also, regarding the issue that teenagers can play internet games during late night time periods with the identification of another person, the Compulsive Shutdown System imposes a certain difficulty for adolescents under 16 when it comes to obtaining the identification of other persons. Rather, the system may bring about the effect of their avoiding internet games during late night time periods by letting teenagers know that internet game use during late at night is illegal and imposing a burden of being involved in illegal activity on them [15]. The Compulsive Shutdown System thus instills a sense of crime and an amount of inconvenience for teenagers, contributing to the prevention of internet game use late at night. The Compulsive Shutdown System might bring about a risk of causing another kind of addiction among adolescents by forcing them to find another object to immerse themselves in. Yet, the Compulsive Shutdown System revolves around the possibility of internet games causing a special addiction. Unlike other contents on the internet, real-time internet games continuously stimulate the interest of users in a virtual world. Since several gamers simultaneously access internet games and compete and cooperate with each other, internet games can create a greater interest and have more entertainment elements than other games or objects to immerse themselves in. Therefore, the risk of getting addicted to them is high, and in this regard, the need for the regulation should be recognized. It is not easy for juveniles aged under 16 to find other addictive media to replace internet games with such characteristics, and even if adolescents find other objects to immerse themselves in, that does not mean that the Compulsive Shutdown System fails to achieve the purpose of preventing game addiction among adolescents. The question of selecting a means among various available ones to achieve the legislative purpose of preventing game addiction among juveniles is basically at the legislators' discretion. Although it is natural that any action or selected means that the State takes should be appropriate to the purpose to be achieved, this does not necessarily mean that the action or means should be the most rational and efficient or

unique. From this aspect, the Compulsive Shutdown System should be considered as an appropriate means to protect juveniles from internet game addiction [16].²⁵

5.4 Minimum Restriction of Basic Rights

The minimum restriction of basic rights means that legislators should select the means which most respects and least infringes upon basic rights among various appropriate means to achieve the legislative purpose, even in the case of restricting basic rights to realize public interest [17]. The Compulsive Shutdown System can be considered as meeting such requirement in that it targets young students aged under 16, or middle school students or younger and applies only to internet games offered in real time from midnight to 6 a.m. Parents can allow children to play internet games even during late night times by using their ID and passwords to access the internet, and as for business operators or adolescents, the regulation is limited only to young students under the age of 16 during late night time periods when internet games are least used. Yet, there is a need to review whether there are means to restrict the basic rights of adolescents, business operators and parents to a lesser extent, while also achieving the purpose of preventing game addiction among adolescents and securing a proper sleep time at the same level. That is, the issue can be raised as to whether implementing the Compulsive Shutdown System is appropriate when the game rating system and the Selective Shutdown System, one of the countermeasures against immersion and addiction, can achieve the same purpose.

5.4.1 Rating System and Compulsive Shutdown System

First, the criteria for rating classification include whether the subject and content of game products display obscenity, violence, etc. that can have harmful effects on adolescents, their level of severity, or whether they express specific ideology, religion, custom, etc. that can affect adolescents mentally and physically and their level of severity (Paragraph 1 of Article 8 of the Enforcement Rule of the Game Industry Promotion Act). Considering such criteria, the game rating system is aimed to regulate adolescents' access to games from the beginning by examining whether allowing teenagers to access the games is appropriate by taking into consideration their nature.

However, the Compulsive Shutdown System aims to prevent game addiction among adolescents and ensure a proper sleep time. Considering these purposes of the Compulsive Shutdown System, whether games include obscene and violent images is not a direct and important element. On balance, since the game rating system and the Compulsive Shutdown System are different in their purposes of regulating games, it is hard to argue that separately from the game rating system, taking the Compulsive Shutdown System excessively restricts basic rights.

5.4.2 Selective Shutdown System and Compulsive Shutdown System

As seen above, the Game Industry Promotion Act imposes obligations on game products-related business operators to prevent excessive use of game products in Paragraph 1 of Article 12-3, especially including the restriction on the method and time of game product

²⁵ According to a survey conducted by the Korean Women's Association for Communication Studies (KWACS), in regard to the effectiveness of the Compulsive Shutdown System, 72.3% of teachers, 61.8% of parents and 45.3% of juveniles responded that the System is very effective or effective in preventing game addiction.

use upon the request of adolescents or their legal representatives in Subparagraph 3²⁶. Therefore, adolescents aged under 16 and business operators are likely to be restricted in the use and provision of game products by the selection of adolescents or their legal representatives pursuant to Subparagraph 3 of Paragraph 1 of Article 12-3 and also they can be prohibited from the use and provision of internet games during late night time periods pursuant to Paragraph 1 of Article 23-3 of the Juvenile Protection Act²⁷. Here, an issue of double regulation can be raised in that the two regulations are for the same purpose. However, as the former regulation is based upon the request of adolescents or their legal representatives, it is aimed to guarantee autonomy of the household including adolescents or parents' right to foster children, rather than restricting the freedom of adolescents. In this regard, it is difficult to view the two as constituting redundant regulation from the adolescents' perspective, even though they are for business operators. And also, the question of selecting a means among various available ones to achieve the legislative purpose is basically at the legislators' discretion. As there is a need to limit a total amount of playing time to prevent adolescents from getting addicted to games, the Selective Shutdown System can be considered as a supplementary means to prevent game addiction by limiting long time use of internet games, which can still happen even with the Compulsive Shutdown System in place. There is a limit to achieve the purpose of preventing game addiction with the Compulsive Shutdown System alone. As a supplementary means for that, the Selective Shutdown System of restricting a total amount of playing time is being implemented. And yet, to prevent excessive restriction of the freedom of adolescents and business operators, the system is autonomously taken by adolescents or their legal representatives.

Next, there is the question of whether to violate the minimum restriction of basic rights by implementing the compulsive regulation even though the Selective Shutdown System can achieve the purpose at the same level. However, it is questionable whether the Selective Shutdown System is actually effective to the same level with the Compulsive Shutdown System when it comes to the purpose of preventing game addiction. And the Selective Shutdown System has nothing to do with the purpose of creating an environment necessary for the healthy growth and daily life and educational activities of adolescents by ensuring their right to sleep. In addition, the Compulsive Shutdown System was introduced on the basis that the self-control system by adolescents, parents²⁸ or business operators has already reached its limit. Therefore, the most effective and unique method to prevent game addiction at the current stage is to compulsively restrict the provision of games from the outside. As so, it is hard to acknowledge that introducing the Compulsive Shutdown System violates the minimum restriction of basic rights. In particular, it is all the more true in that parents can implement the Selective Shutdown System by allowing their children to play games through internet connection during late night time periods. From this aspect, the Compulsive Shutdown System is the necessary and minimum measure to achieve the purpose of

²⁶ The Game Industry Promotion Act defines in Paragraph 5 of Article 12-3 that if prevention measures taken by game products related business operators are considered as insufficient, the Minister of Culture, Sports and Tourism may give a corrective order. A person who does not follow such order shall be punished by imprisonment for not more than two years or by a fine not exceeding 20 million won. (Paragraph 1 of Article 45)

²⁷ The Game Industry Promotion Act defines that the term "juvenile" means persons under 18 years of age. (Subparagraph 10 of Article 2)

²⁸ The internet addiction rates of juveniles are relatively high in low-income, single parent, multi-cultural and double-income families where it is hard for parents to make proactive intervention in children. (National Information Society Agency, A fact-finding survey of internet addiction for 2011, March 2012, p.57) It is much harder to expect the legal representatives of such families to know the Selective Shutdown System and request game products providers in a timely way.

preventing game addiction among teenagers and ensuring a proper sleep time.

5.5 Proportionality between Public Interests to be Achieved and Private Interests to be Restricted

Public interests to be achieved by the Compulsive Shutdown System include helping adolescents grow into a sound human being by preventing game addiction and securing their healthy physical development by ensuring a proper sleep time. In addition, adolescents can make good use of other time periods than late night time periods to improve their capability and talents. At the same time, society can prevent various social side effects that can happen due to game addiction among adolescents and also reduce the social costs incurred by game addiction, including the cost of public relations and management for the government's anti-game addiction measures, the social cost incurred by crimes committed by young addicts [18], the cost of a decrease in human capital accumulation and other social costs spent on treatment or counseling [19].²⁹ Although the Compulsive Shutdown System bars juveniles from using internet games from midnight to 6 a.m., this is merely the minimum measure to protect the youth. Considering the importance of adolescents' healthy growth to individuals and society and the significance of the State's duty of juvenile protection prescribed by the Constitution, public interests to be achieved by the Compulsive Shutdown System are very great and important compared to the disadvantages that can be caused by restricting the freedom of adolescents.

Meanwhile, the Compulsive Shutdown System may shrink the gaming industry by regulating game providers, its direct regulation target, such as restricting their freedom of business and imposing on them the cost to perform the obligations. However, considering their immaturity, young students under the age of 16 should be especially protected by the State. Creating an environment necessary for the healthy growth of adolescents is the State's constitutional duty. Therefore, considering such public interests, it is difficult to accept a partial restriction on the business activities of business operators as being excessive. In addition, internet game providers already implement and operate the authentication system due to the game rating system and the obligation to prevent excessive use of game products. Therefore, there is no additional cost on the part of business operators, or at the worst it imposes but small cost for profit increases resulting from market size expansion³⁰. It is also difficult to view the prohibition of internet games to children aged under 16 from midnight to 6 a.m. as causing a significant economic damage to the gaming industry³¹. Furthermore, the Compulsive Shutdown System rather expands a number of healthy game users and encourages economic activities taking into consideration public interests in the long term, thus sustainably developing the gaming industry. Most of all, the public interest of juvenile protection from game addiction must be considered much more important compared to a short-term profit decrease resulting from the restriction of business activities. Regarding parents' right to foster children, the Compulsive Shutdown System rather supplements the exercise of parents' right to foster and parents can implement the Selective Shutdown System. In this regard, it is difficult to view parents' right to foster children as being excessively restricted, in light of the

²⁹ According to an analysis of the Ministry of Health and Welfare in 2008, internet and online game immersion of children and juveniles cost society at least 508.2 billion won.

³⁰ Korean Society of Legislation Studies, The Shutdown System impact report, 2011, p.117

³¹ If the Compulsive Shutdown System which bans children aged under 16 from using internet games from midnight to 6 a.m. brings a huge economic loss to the gaming industry, it, rather, clearly proves that the risk of juveniles getting addicted to games is grave and the System should be introduced as early as possible.

public interest to be achieved.

6. Conclusion

Due to the rapid development of a material civilization—including science and technology and the expansion of capitalistic economic activities focusing on profits rather than other social purposes—adolescents, still immature and at the development stage, are highly likely to be exposed to environments harmful to them. Therefore, there is a growing need to protect juveniles from such harmful environments and ensure their development into a sound human being at the national and social level. In particular, countries around the world recognize the serious implications of internet gaming among adolescents—the dark side of ICT development—and are planning various regulations depending on their situation. Korea has implemented the game rating system in accordance with the Game Industry Promotion Act and has taken anti-game immersion and addiction measures. Nonetheless, as internet game addiction among adolescents persists as a social issue, the nation found it impossible to rely on self regulatory efforts on the part of the household and gaming industry. Accordingly, Korea has come to introduce and implement the Compulsive Shutdown System to ban children aged under 16 from using internet games from midnight to 6 a.m. under the Juvenile Protection Act. Strong opposition against the system still remains, starting from the time when the introduction of the system was first discussed at the National Assembly and continuing even today, more than a year after its enforcement. The main argument of critics of the system is that it infringes upon basic rights. Currently the Constitutional Court is reviewing whether the provision of the Juvenile Protection Act, which prescribes the system, should be viewed as unconstitutional. And the gaming industry is aggressively lobbying the newly launched government for the repeal of the system. Therefore, it remains to be seen whether the system will continue in its implementation.

From this point of view, we have examined whether the Compulsive Shutdown System infringes upon the freedom of internet game providers and children aged under 16 and parents' right to foster children by considering the problematic elements comprehensively. Our conclusion is that the system does not infringe upon basic rights in violation of the "principle of prohibition of excessive restriction." It is very encouraging that the State, which in the past was passive in dealing with negative consequences from excessive game use by adolescents while focusing on the business aspects of games, took up the issue and prepared various systems for juvenile protection through the Compulsive Shutdown System. Yet, in the case of modifying the systems concerning this, the government has to plan as comprehensive and effective of a measure as it possibly can by predicting the trends of technology development and game use, and also set detailed standards to ensure that the system should not become an excessive or inappropriate regulation. This is because focusing on direct and compulsive regulations while imposing all the burdens from game addiction and the side effects on teenagers or game companies is a problem.

In addition, the State's duty to protect juveniles from the harmful environment and help their healthy growth and development should not be limited to introducing and implementing such a direct system. Although the State's compulsive intervention may be positive since it is hard to expect a self purification capability to exhibit itself concerning game use among teenagers, a plan to prevent game addiction among adolescents from the long-term and fundamental perspectives should be prepared as well [20].³² As internet games include various

³² Adolescents prefer to traveling, watching cultural and arts performances and engaging in sports activity but they

elements—such as affordable cost, easy access, autonomous capability and active interaction, stress reduction and continuous interest stimulation, which can make them a representative leisure activity in today's information society—it will be a difficult task to create an opportunity to replace them. Nonetheless, if teenagers' excessive immersion in internet games with such characteristics is an issue, we have to make efforts to prepare an opportunity for various cultural activities³³ [21] such as sports activities, so that all juveniles can cultivate a sense of community through interaction and autonomous exercise of capability, reduce the psychological burden of learning at home and school [22],³⁴ and create useful content so that juveniles make good use of ICT technology to grow into a sound and democratic citizen. Other than blocking objects to immerse themselves in, we must create and ensure easy access to alternative entertainment cultures and venues³⁵ [23, 24] that can steer teenagers away from dependency on games as a means of leisure activity, and strengthen measures such as education, psychological counseling and public relations so that juveniles can exercise self control against internet game use by themselves.

References

- [1] Z. Hussain, M. D. Griffiths, T. Baguley, "Online gaming addiction: Classification, prediction and associated risk factors," *Addiction Research & Theory*, vol. 20, no.5, pp. 359-371, 2012. [Article \(CrossRef Link\)](#)
- [2] M. D. Griffiths, "Psychology of computer use: XLIII. Some comments on addictive use of the Internet by Young," *Psychological Reports*, vol.80, pp. 81-82, 1997. http://www.academia.edu/429664/Griffiths_M.D._1999_.Internet_addiction_Fact_or_fiction_The_Psychologist_Bulletin_of_the_British_Psychological_Society_12_246-250
- [3] K. S. Young, "Internet Addiction: Symptoms, Evaluation, And Treatment, Innovations in Clinical Practice," vol.17, pp. 241-246, 1999. <http://www.netaddiction.fusionxhost.com/articles/symptoms.pdf>
- [4] For more information about Center for On-Line Addiction, visit <http://www.netaddiction.com>
- [5] For more information about ReSTART, visit <http://www.netaddictionrecovery.com>
- [6] NIA, "Major countries' policies to remedy internet addiction and implications," *CIO Report*, vol.23, pp. 6-10, 2010. http://www.papersearch.net/view/detail.asp?detail_key=1s400060&code=CP00000002
- [7] <http://gamepolitics.com/2010/07/29/vietnam-comes-down-hard-online-games>
- [8] K. Gharib, A. Homayouni, M. K. Yanesari, "High levels of stress and addiction to internet," *European Psychiatry*, vol.25, p. 739, 2010. [Article \(CrossRef Link\)](#)
- [9] S. J. Lee, J. K. Park, "A Study on Online Game Addiction Situation of Juveniles and Addiction Prevention Education Program," *Korean Youth Development Institute*, p. 61, 2004. <http://www.dbpia.co.kr/Article/422403>
- [10] B. J. Bushman, C. A. Anderson, "Media violence and the American public: Scientific facts versus media misinformation," *American Psychologist*, vol.56, pp. 477-489, 2001.

are actually spending most time in playing computer games and watching TV, which shows that the socio-cultural environment may be an important cause of juvenile game addiction.

³³ For more information about the positive effect of sports activity on the self-esteem, stress reduction and attachment relation with parents, a greater social awareness of the need for sports activities for healthy growth of juveniles, physically and mentally, and the need for more opportunities in terms of time and space so that juveniles enjoy sports more easily.

³⁴ The desire to overcome the burden of academic records by showing off through games is the main cause of juveniles being immersed in games.

³⁵ According to an analysis of correlation between leisure activity types for juveniles and parents' education and income levels, leisure activities characterized by entertainment elements, such as broadcasting media or games, show negative correlation and leisure activities characterized by cultural capital accumulation, such as visiting cultural and arts related places or enjoying outdoor hobbies show positive correlation.

- <http://psycnet.apa.org/doi/10.1037/0003-066X.56.6-7.477>
- [11] C. A. Anderson, K. E. Dill, "Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life," *Journal of Personality and Social Psychology*, vol.78, pp. 772-790, 2000. https://www.uni-muenster.de/imperia/md/content/psyifp/aeechterhoff/wintersemester2011-12/seminarthesenfelderdersozialpsychologie/12_anderson_dill_videogames-aggressivethoughts_jpsp_2000.pdf
- [12] R. A. Davis, "A cognitive-behavioral model of pathological Internet use," *Computers in Human Behavior*, vol.17, pp. 187-195, 2001. [Article \(CrossRef Link\)](#)
- [13] T. S. Choi, J. Y. Ahn, "The effect of the psychological environment of households and human relation skills on internet game addiction of juveniles," *Journal of Korean Association of Computer Game*, vol. 2, no.23, p.133, 2010. <http://www.riss.kr/link?id=A60203326>
- [14] M. S. Yun, Y. O. Lee, "Comparison of relational models of awareness of social support, computer game addiction and academic reports between male and female middle school students," *Korean Journal of Educational Methodology Studies*, vol. 17, no. 2, p. 186, 2005. <http://www.riss.kr/link?id=A76527297>
- [15] J. H. Park, "Significance and limitation of internet regulation for juvenile protection: centered on the issue of the introduction of the so-called Shutdown System," *Journal of Media Law, Ethics and Policy*, vol. 10, no. 2, pp. 111-145, 2011. <http://www.riss.kr/link?id=A60302542>
- [16] H. K. Cho, "Introduction of the Game Shutdown System and future policy direction," *Current Issue Report*, vol. 118, p.31, 36, 2011. http://www.nars.go.kr/fileDownload2.do?brd_Seq=2035&cmsCd=CM0023&fileName=%28%ED%98%84%EC%95%88%EB%B3%B4%EA%B3%A0%EC%84%9C118%ED%98%B8-20110527%29%EA%B2%8C%EC%9E%84+%EC%85%A7%EB%8B%A4%EC%9A%B4%EC%A0%9C%EC%9D%98+%EB%8F%84%EC%9E%85%EA%B3%BC+%ED%96%A5%ED%9B%84+%EC%A0%95%EC%B1%85+%EB%B0%A9%ED%96%A5.pdf&doc_id=94748
- [17] H. J. Woo et al., "A survey of the awareness of parents, teachers and juveniles on the media use and addiction of juveniles," *Ministry of Gender Equality and Family*, pp. 92-96, 2010.
- [18] Constitutional Court, 96 Hun-Ga 5, May 28, 1998. <http://search.court.go.kr/th/pr/selectThsPr0101List.do>
- [19] S. A. Han, H. M. Lee, "Relation between online game addiction and youth crime," *Korean Journal of Criminal Psychology*, vol. 2, no. 1, pp. 235-238, 2006. <http://www.riss.kr/link?id=A76443943>
- [20] Korean Society of Legislation Studies, The Shutdown System impact report, 2011, p.105
- [21] Y. J. Lee, "A Study on juveniles' awareness of the Shutdown System and policy," *Journal of Digital Policy*, vol. 9, no. 3, pp. 22-23, 2011. <http://www.riss.kr/link?id=A82650918>
- [22] Y. S. Kim, "A study on leisure activity types for juveniles and characteristics related to individuals and families," *Korean Journal of Youth Studies*, vol. 18, no. 7, pp. 125-134, 2001. <http://www.riss.kr/link?id=A82636114>
- [23] J. Suler, "Computer and cyberspace addiction," *International Journal of Applied Psychoanalytic Studies*, vol. 1, no. 4, pp. 359-362, 2004. [Article \(CrossRef Link\)](#)
- [24] W. S. Seo, "A study on the effect of the socio-economic environment on leisure activity of Juveniles," *Korean Journal of Youth*, vol.18, no. 1, pp. 291-292, 2007. <http://www.riss.kr/link?id=A75090195>;
- [25] J. R. Lee, "Socio-cultural implications of online games," *Journal of Media Law, Ethics and Policy*, vol. 7, no. 2, p. 144, 2008. <http://www.riss.kr/link?id=A60302480>



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