

A Research on the Prevention of Smartphone Addiction

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아동 · 청소년 스마트폰 중독 예방에 관한 연구

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Abstract In this study, we point out the problem of child and adolescent smartphone addiction, analyze the effects of these smartphone addictions on adolescents, and study how to prevent smartphone addiction. Most young people living in the current era of smartphone have adoption smartphones. Smartphone addiction among adolescents have caused a variety of problems including youth personality, sociality, interpersonal relationships, and depression. We do not only analyze the problem of addiction. We do analyze various problems such as academic stress, family discord, peer relationships, etc. Investigate is not only the situation at risk, but also, it considers its environment. In this research, we presented not only the problem of smartphone addiction in adolescents itself, but also the effects of some problems on adolescents and how to prevent smartphone addiction.

Key Words : Smartphone addiction, Young adult, Child addiction, Addiction prevention, Environment

요약 본 연구는 아동·청소년 스마트폰 중독에 대한 문제인식을 토대로 이러한 스마트폰 중독이 아동·청소년에게 어떠한 영향을 미치는지를 분석하고, 스마트폰 중독을 예방하는 방법에 대해 제안하고 있다. 스마트폰의 대량 보급으로 현 시대를 살아가고 있는 청소년들은 대다수가 스마트폰을 소유하고 있으며 이로 인해 파급된 아동·청소년들의 스마트폰 중독이 아동·청소년의 성격, 사회성, 대인관계, 우울증 등 다양한 문제를 일으키고 있는 실정이다. 이러한 중독의 문제를 아동·청소년들 당사자들의 특성 문제로만 볼 것이 아니라 스마트폰 중독에 빠지게 만드는 아동·청소년의 환경, 즉 학업스트레스, 가정불화, 또래간의 관계 등의 다양한 문제로 인해 아동·청소년들이 스마트폰 중독의 위험에 항상 노출되어 있음을 인지할 필요가 있다. 본 연구에서는 아동·청소년 스마트폰 중독의 문제점을 살펴보고 이러한 문제들이 아동·청소년에게 끼치는 영향과 더 나아가 이를 방지하기 위한 몇 가지 스마트폰 중독 예방방법을 제시하고 있다.

주제어 : 스마트폰 중독, 청소년, 어린이 중독, 중독 예방, 환경

1. Introduction

When smartphones first came on the market, many people thought it was really possible that the functionality of a PC could be concentrated

in this tiny device. However, smartphones are rapidly spreading and taking place, and are essential to modern society. As such, many people in modern society are using smartphones. Table 1 shows the global

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smartphone penetration. As such, the penetration rate of smartphones in the ranking countries is shown to be very high.

Table 1. List of countries by Smartphone Penetration

Rank	Country	Penetration
1	South Korea	88
2	Australia	77
3	Israel	74
4	United States	72
5	Spain	71
6	New Zealand	70
7	United Kingdom	68
8	Canada	67
9	Chile	65
10	Malaysia	65

According to the youth smartphone usage survey released by the Ministry of Gender Equality and Family in 2014, it was found that about 85% of high school students and 86% of middle school students are using smartphones. That is, more than 8 out of 10 teenagers are using smartphones [1]. While so many people are using smartphones, it's not long since these smartphones have actually become widespread. As a result, studies on smartphone problems are inadequate compared to other studies [2]. Smartphones have brought positive changes such as convenience, new ways of communication, and various technologies that are unparalleled with life in the past, but they also brought negative factors.

Adolescents who are addicted to smartphones may be reluctant to communicate with others offline, neglect their studies, or even discord with their families. There are no exact standards or definitions for smartphone addiction, but there are certain adolescents or children who reach anxiety or depression levels if their smartphones are not in their hands. The cause of this problem may not be unique to

adolescents or smartphones.

The organization of this paper is dealt with as follows. Chapter 2 describes smartphone addiction and the circumstances in which adolescents fall into smartphone addiction, and Chapter 3 describes the process of falling into smartphone addiction and the problems of teenagers who fall into smartphone addiction. In chapter 4, the method of smartphone addiction prevention is described, and the conclusion of this paper is concluded.

2. Smartphone addiction environment

2.1 Smartphone addiction

Convenience, new communication, and development of various technologies brought by smartphones are obviously indispensable factors in modern society. Because of this, much research is being conducted on this part, but the negative part tends to be slow and psychological [3]. For this reason, the definition of smartphone addiction is not accurate, but this paper intends to define it as the effect of offline and 'withdrawal phenomenon' due to smartphone addiction.

Smartphone addiction is defined as the level of feeling the life offline without using a smartphone, and feeling anxiety and nervousness without a smartphone. Smartphone addiction is a kind of tolerance that does not satisfy even though many smartphones used like other addiction phenomenon[11].

Feeling the life offline, feeling anxious and nervous, use the smartphone, which is a vicious cycle of becoming more addicted to the smartphone again. Currently, adolescents are easily exposed to this vicious cycle, and adolescents who are not used to self-control than adults are more difficult to get into addiction on their own.

2.2 Smartphone addiction environment

Smartphone addiction among teenagers in modern society is a big problem. Adolescents' smartphone addiction is about twice as high in adults.

Of course, smartphone addiction among adults is also high, but it is important for adolescents to understand how the environment of adolescents affects smartphone addiction [4]. There are various factors in smartphone addiction among adolescents. Today, when the number of working-in-law couples has increased, the youth have had more time alone at home. In this situation, the most easily encountered medium for adolescents is a smartphone. Therefore, this environment is also an environment where teenagers are easily exposed to smartphone addiction.

In addition, adolescents who grew up in a family who wants to escape due to difficult family circumstances, academic stress due to coercive attitude or excessive attention of parents, or indifferent parental attitude, discord with classmates, smartphone games, life stress, etc. There are cases where smartphone addiction is caused by a variety of circumstances.

Falling in the variety of conveniences and features that smartphones bring can lead to dangerous situations that leave you indifferent to reality.

3. Problems of Smartphone Addiction

3.1 Smartphone addiction procedures

Prior to describing the smartphone addiction process, Davis (2001) considered addiction as a morbid use as to what conditions such addiction occurs. In other words, it is basically vulnerable to addiction, experiences in various surroundings, and in various media, leading to

the phenomenon of addiction that appears pathological [5].

Similarly, the smartphone addiction process was initially used to use various positive factors such as convenience, but it is highly dependent on the smartphone due to the continued use of the smartphone, and later, addiction phenomenon. This addiction process is aggravated by the youth not recognizing themselves as smartphone addiction.

Many adolescents do not realize that they are smartphone addictions, which is true for adults as well. Clearly, there is a need for smartphones early in the process of smartphone addiction.

Today, it is difficult for virtually all age groups to use smartphones that are closely related to modern society, not just teenagers or the generations commonly referred to as the Internet generation. For this reason, the use of smartphones naturally becomes severe without being aware, and without a smart phone to end, it is impossible to live, and you feel stress and anxiety as well as extreme anxiety. Fig. 1 shows relationships of addiction factors. Cognitive behavioral models of chronic pain explains that the evaluation of the pain experience by the patient greatly determines the amount of pain that is experienced as well as its negative consequences.

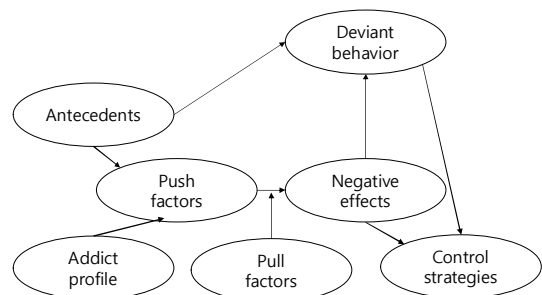


Fig. 1. Cognitive Behavioral Model

As mentioned earlier, the problems of smartphone addiction vary. Smartphone

addiction is also associated with crimes of adolescents, starting from the point of causing discord in the home or neglecting relationships with others. In the past, youngsters who were called delinquents, or the ones the teacher had troubled with, were “talking in class, running around in the classroom or hallway, playing with female classmates”, but rape, Assault and defenseless sexual intercourse can lead to pregnancy, alcohol, robbery, theft and even suicide [6]. This problem is relatively insensitive to committing such a crime in reality because it is a crime that can be seen indirectly in the world seen through the medium of smartphones. Adolescents' smartphone addiction group showed low self-control, resulting in violent behavior and emotional problems such as depression. In other words, the greater the degree of smartphone addiction, the more vulnerable than the general public in emotional aspects [7]. Many reasons for smartphone addiction, life stress, disagreement with classmates, family disagreement have a lot of emotional effects on adolescents. In this situation, depending on the smartphone, the emotional part naturally becomes weak. will be. Emotional weakness can be a big problem, most notably suicide.

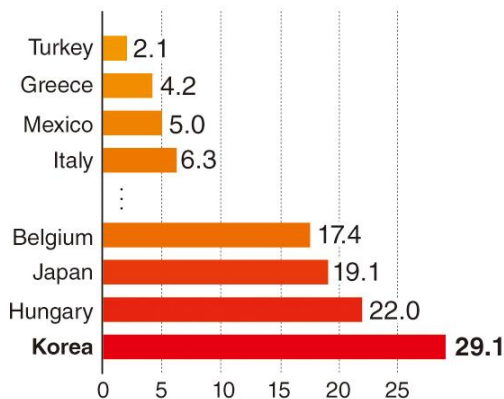


Fig. 2. Suicide rate in OECD Countries

Fig. 2 shows After Koreans, Hungarians were

most likely to take their own lives — marking 22 per 100,000 people — followed by Japan at 19.1 [12]. The suicide rate of youth in South Korea is slightly above the OECD average. However, it is not only a high figure in terms of the education level of students, but the suicide rate of Korea is steadily increasing, but the suicide rate decreases globally. Although suicide rate is not only related to smartphone addiction, it can be seen that the problem of smartphone addiction is serious because adolescents who are addicted to smartphone have higher suicide rate than general teenagers. Smartphone addiction also causes problems for adolescents' physical health. According to a study by the Korean Institute of Crisis Management, Inje University, most of the health problems caused by smartphone addiction accounted for 31% of the eyes, and 15% of them suffered from neck, shoulder, wrist or finger pain. Headache was as high as 5% and 65% of the total subjects complained of the above pain [8]. As such, smartphone addiction among teenagers is closely related to the physical health of teenagers. In addition to the above pains, excessive smartphone use can also cause problems such as obesity and decreased vision. Problems such as obesity and decreased vision due to excessive use of smartphones can also affect schoolmates in real life, which causes smartphone-addicted teenagers to rely on smartphones once again. It can be seen as a repetition. As smartphone addiction causes serious vicious cycles such as drugs and cigarettes, there is a need to prevent adolescents from falling into addiction.

4. How to prevent smartphone addiction

This paper describes how to prevent smartphone addiction in relation to the environment. Most of the youth do not

recognize whether they are smartphone addiction even if they are smartphone addiction. Not only mental problems caused by smartphone addiction but also physical problems are not recognized as a phenomenon caused by smartphone addiction [9]. Prior to smartphone prevention, youth need to be aware of the seriousness of smartphone addiction in today's youth. Most of the communication for establishing or maintaining the relationship with the people around is done on the smartphone, so all the people around are using the smartphone, so it is more difficult to realize whether they are addicted.

This is, of course, the convenience that smartphones have a big impact on life. Starting with a trivial alarm, you often use your smartphone for schedules, communicating with people around you, shopping, cartoons, games, cameras, voice recordings, and even studying. For this reason, it is difficult for experts to distinguish smartphone addiction, and it is impossible to set exact criteria for addiction. In this situation, it is hard for young people who are mentally underdeveloped that they are smartphone addiction. Because of smartphone addiction prevention, including a lot of help from people around you, including parents. In fact, not only smartphone addiction, but also multiple addictions are the right way to prevent rather than escape. It is most important that teenagers do not come into contact with the environment, where the problems caused by the environment or addiction cause a vicious cycle [10,13-15].

5. Conclusion

First, related ministries should work together to ensure the habit of using the Internet and smartphones soundly, and a professional counseling agency should be established and

operated nationwide to support the improvement of the Internet and smartphone usage behavior for all citizens. do. In particular, in order to enable the youth to use the media in a healthy way, cooperation with relevant institutions such as the education office and schools should establish an institution or a plan to systematically support counseling and treatment for the overuse of the media.

Second, we recommend selective shutdown to reduce adolescents' computer and smartphone addiction and side effects. Shutdowns are said to be more effective when they are selective than forcible. An optional shutdown system is a child game usage management service system that allows parents to disclose their child's payment details and usage time when parents request a game company and allow parents to restrict their children's access to games. In order to solve the problem of smartphone addiction, adolescents think that the method of giving autonomy to the family is more effective than uniform pre-regulation. Also, to prevent smartphone addiction, you should be aware of your own habits rather than coercive attitude.

Third, experts suggest ways such as meditation and speculation as a solution to smartphone addiction. It's a good idea to stay away from your smartphone for a while, or leave for a while with no smartphone at all. The problem of addiction stems from the failure of self-regulation, so you will need to help you get rid of your addiction by continuing to meditate, especially at school. If you continue to meditate to prevent recurrence, you will also save long-term costs for drugs and medical treatment. Meditation is one of mental training methods for understanding oneself in a systematic way to develop control and wisdom in life. There are breathing meditations, walking meditations, and spontaneous meditations.

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