A study on Korean Adolescents' Internet Addiction and Related Factors: Based on the 15th(2019) Youth Health Behavior Survey

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한국 청소년의 인터넷 중독과 관련 요인
: 제15차(2019) 청소년건강행태조사를 기반으로

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Abstract
This study aims to prepare basic data to prevent health problems caused by internet addiction groups that can cause various problems for growing youth. This study used the original data of the 15th Youth Health Behavior Online Survey in 2019. It is a self-written online survey tool for grasping the health behavior of Korean middle and high school students. The stratified colony extraction method was used in 17 cities and provinces, and 400 middle schools and 400 high schools were selected as subjects who used the internet for the last 30 days. Therefore, a total of 43.006 students were analyzed. According to the analysis results, Internet addiction related to the general characteristics of the subjects there were statistically significant differences in all variables except the residential form. There were statistically significant differences in all variables related to health-related behaviors. The more people who think they are fat' and the more physically inactive, the higher the tendency for internet addiction. The more the subjects who answered 'not enough' for the degree of fatigue recovery from sleep, the more likely they were to respond to 'I feel a lot' of stress perception, the higher the tendency for internet addiction. Those who have experienced sadness or despair in the past 12 months, those who have thought of suicide, and those who have attempted suicide have a higher tendency to become addicted to the internet. In addition, those who smoked, those who drank, and those who had sexual intercourse experiences during the past 30 days showed a higher tendency to addiction to the internet. Therefore, it is necessary to develop and apply various programs to investigate the characteristics of the internet addiction group that can cause various problems for adolescent.

Key Words: Adolescent, Internet Addiction

1. Introduction

As the modern society enters the era of digital computers, all daily life is possible through the internet, and it has become a machine that makes life enriched. In Korea, interest in internet addiction has been increasing, and various policies and studies are being conducted. In particular, the adolescents were found to be most vulnerable to the risk of overdependence on internet. If they were too obsessed and depended on enough to cause trouble in daily lives, it appeared that various symptoms such as physical, emotional, and social were caused.

Based on the results of the 15th(2019) Youth Health Behavior Survey, this study aims to prepare basic data to prevent health problems caused by internet addiction groups that can cause various problems for growing youth.

2. Research Method

This study used the original data of the 15th online survey of health behaviors conducted by the Ministry of Education, the Ministry of Health and Welfare and the Centers for Disease Control and Prevention in 2019. Youth Health Behavior Online Survey is a self-written online

survey tool for grasping the health behavior of Korean middle and high school students.

After distributing 5 middle and high schools by 17 cities and provinces, a stratified colony extraction method was used, and 60,100 of 400 middle schools and 400 high schools were surveyed. Due to the purpose of the subject of this study, a total of 43,006 people were analyzed as subjects using the weekday(Mon-Fri) internet for purposes other than learning for the last 30 day. In this study, adolescents with internet addiction were those who used more than 4 hours a day on average per week.

The general characteristics of the subjects were analyzed by gender, type of school, academic achievement, economic status, and residential form. Health-related characteristics were analyzed by subjective body cognition-related 1 question, physical activity-related 4 questions, sleep-related 1 question, subjective stress cognition-related 1 question, and mental health-related 3 questions. smoking, drinking, sex-related question. The Youth Health Behavior Online Survey is based on a composite sample design that has undergone stratification, clustering, and multi-stage sampling for representative samples. The health behavior of Korean adolescents was estimated by assigning weights to students participating in the survey. Therefore, a complex sample analysis was performed by assigning strata, stratification, and weight variables.

3. Results

Internet addiction according to the general characteristics of the subjects, there was a statistically significant differences in all variables except the residential form. Gender was 14.0% for women, 3.5% higher than 10.5% for men. In type of school, 13.7% of middle school students were 2.8% higher than 10.9% of high school students. The academic achievements were 'lower' 18.6%, 'middle' 11.2%, and 'upper' 8.3%. The status of the economy were 17.2% for 'low', 12.5% for 'middle', and 10.5% for 'high'. The lower the academic achievement and the lower the economic level, the more the Internet addiction tendency. There were statistically significant differences in all variables related to health-related factors. In Perceived body image, the more 'Fat' tend to be addicted (13.7%). The more people who did not do physical activity, the higher the tendency for internet

addiction. The more likely the subjects who responded to sleep to 'not enough' (13.7%), the higher the tendency to addiction to the internet. As for the subjects who answered 'I feel a lot of stress' (15.2%), the level of perceived stress was higher in internet addiction tendency. Those who experienced sadness or despair (15.8%), those who thought of suicide (18.3%), and those who attempted suicide (23.1%) showed a high tendency to internet addiction. In addition, those who smoked (21.2%), those who drank (17.2%) and those who had sexual intercourse (17.0%) showed a high tendency to addiction to the internet Conclusions: It is necessary to develop and apply various programs to investigate the characteristics of the internet addiction group that can cause various problems for adolescent.

4. Conclusion

It is necessary to develop and apply various programs to investigate the characteristics of the internet addiction group that can cause various problems for adolescent.

Table 1. Prevalence of internet addiction by general characteristics (N=43,006)

Variables	n	%	Internet Addiction				Chi-square	p
			No(%)		Yes(%)			
			Estimate	SE	Estimate	SE		
Gender								
Male	21,244	49.2	89.5	0.2	10.5	0.2		
Female	21,762	50.8	86.0	0.3	14.0	0.3	120.054	<.001
Type of school								
Middle school	22,878	49.9	86.3	0.3	13.7	0.3		
High school	20,128	50.1	89.1	0.3	10.9	0.3	75.654	<.001
Academic achievement								
Upper	16,932	39.0	91.7	0.2	8.3	0.2		
Middle	13,168	30.7	88.8	0.3	11.2	0.3		
Lower	12,906	30.3	81.4	0.4	18.6	0.4	751.658	<.001
Economic status								
High	16,768	39.4	89.5	0.3	10.5	0.3		
Middle	20,867	48.4	87.5	0.3	12.5	0.3		
Low	5,371	12.2	82.8	0.5	17.2	0.5	172.520	<.001
Living								
with family	41,001	4.0	87.7	0.2	12.3	0.2		
with others	2,005	96.0	88.8	0.9	11.2	0.9	2.037	.245

Table 2. Prevalence of internet addiction by health-related behaviors   (N=43,006)

Variables	n	%	Internet Addiction				Chi-square	p
			No(%)		Yes(%)			
			Estimate	SE	Estimate	SE		
Perceived body image								
Skinny	10,858	25.3	88.6	0.4	11.4	0.4		
Moderate	15,310	35.5	88.5	0.3	11.5	0.3		
Fat	16,838	39.2	86.3	0.3	13.7	0.3	47.098	<.001
Physical activity over 60 minutes in the last 7 days								
More than once	27,794	64.0	88.8	0.2	11.2	0.2		
No	15,212	36.0	85.8	0.3	14.2	0.3	83.005	<.001
Intense physical activity over 20 minutes in the last 7 days								
More than once	29,043	66.6	88.8	0.2	11.2	0.2		
No	13,963	33.4	85.6	0.3	14.4	0.3	91.658	<.001
Strength training in the last 7 days								
More than once	19,827	45.5	88.8	0.2	11.2	0.2		
No	23,179	54.5	86.8	0.3	13.2	0.3	42.674	<.001
Walking for more than 10 minutes in the last 7 days								
More than once	41,250	96.1	87.9	0.2	12.1	0.2		
No	1,756	3.9	84.0	0.9	16.0	0.9	22.109	<.001
Enough sleep in the last 7 days								
Enough	9,196	20.7	89.4	0.3	10.6	0.3		
Moderate	13,834	32.0	88.6	0.3	11.4	0.3		
Not enough	19,976	47.3	86.3	0.3	13.7	0.3	68.851	<.001
Perceived stress level								
No stress	8,009	18.4	90.3	0.3	9.7	0.3		
Moderate	17,711	41.3	89.4	0.3	10.6	0.3		
A lot of stress	17,286	40.3	84.8	0.3	15.2	0.3	233.626	<.001
Sadness and despair for 2 weeks in the last 12 months								
No	30,928	71.7	89.1	0.2	10.9	0.2		
Yes	12,078	28.3	84.2	0.4	15.8	0.4	191.682	<.001
Thinking of suicide in the last 12 months								
No	37,219	86.5	88.6	0.2	11.4	0.2		
Yes	5,787	13.5	81.7	0.5	18.3	0.5	219.938	<.001
Attempted suicide in the last 12 months								
No	41,779	97.3	88.0	0.2	12.0	0.2		
Yes	1,227	2.7	76.9	1.2	23.1	1.2	132.034	<.001
Smoking in the last 30 days								
No	2,383	50.2	83.4	0.8	16.6	0.8		
Yes	2,348	49.8	78.8	0.9	21.2	0.9	16.614	<.001
Drinking in the last 30 days								
No	10,460	63.7	86.5	0.4	13.5	0.4		
Yes	5,856	36.3	82.8	0.5	17.2	0.5	40.616	<.001
Experience of sexual intercourse								
No	40,935	95.1	87.9	0.2	12.1	0.2		
Yes	2,071	4.9	83.0	0.9	17.0	0.9	46.083	<.001