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The impacts on school life of a occupational therapy student use of smartphone

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Abstract

Purpose: The purpose of this study was to investigate occupational therapy at M college in Changwon and the impact of smart phone use on the school life of college students and to help them find ways to further develop in the future.
Methods; Data collection was conducted using questionnaires, and the questionnaires consisted of 152 total questions with 15 interpersonal questions, 23 problem solving skills, 43 self-efficacy, 16 class participation scale, and 55 self-directed learning scale. It was conducted to first and second graders of M college and conducted a survey through the corresponding academic year from March 26, 2019 to March 29, 2019 to retrieve 120 questionnaires and use them for analysis. The collected data were analyzed using SPSS. Statistic 20.0.
Results: Studies show that "school life satisfaction" is usually the highest at 53 percent. The "smartphone user motivation" was the highest with 50.8 percent, while the "most frequently used feature on smartphones" was the highest with 57.5 percent on SNS. Satisfaction after using a smartphone was the highest with 49.2 percent, while 41.7 percent said it would be easier to acquire and utilize information in the areas of satisfaction.
Conclusion: Smartphone addiction, interpersonal relationships, problem-solving skills, self-efficacy, participation in classes, and self-control learning items are not only affected by one part, but also by the other.

Keywords: class participation, interpersonal relationships, problem-solving skills, self-directed learning, self-efficacy, smartphone

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Ⅰ. Introduction

Recently, smartphone interest and usage have been increasing to the point that it is part of everyday life[1]. A smartphone is an intelligent handset that adds computer-aided functions such as internet communication and information retrieval to a mobile phone, enabling users to install applications of their choice. For us living in today's society, smartphone have long become vital digital media, as they are closely linked to life[2]. Social problems caused by smartphone addiction can not only have a direct impact on the body, but also cause not only economic problems due to excessive fee generation, but also various social problems, such as mental problems that cause withdrawal, daily work or school disruptions, and verbal breakdown caused by smartphone misuse[1]. College students had the highest percentage of smartphon among the total population and also had the highest risk of addiction[3]. Recently, Korean college students have mainly communicated via social network service (SNS), and communication using SNS has been reported to affect smartphone addiction trends, which in turn affects their interpersonal skills[4]. The subject of this study was selected as a college student. The reason is that when I become a college student, I will study according to my own standards, reducing my parents' control. Therefore, the researchers thought that the group that really needed self-directed learning was the group of college students and selected the target group for the study[5]. Because of the huge usage of smartphones has been attempted to correlate to problems, self-efficiency, self-directed learning, interpersonal relationships and class participation.

The purpose of this study was to analyze the correlation between use of smartphones, status of smartphone addiction, problem-solving skills, self-efficiency, self-directed learning, interpersonal relationships, and participation in classes among college students. The specific objectives of this study are as follows.

First, let's look at the usage of smartphone.

Second, look at the status of smartphone addiction.

Third, the problem-solving ability and self-efficacy, self-directed learning, interpersonal relationships, and the degree of class participation are analyzed.

2. Terminology

1) Smartphone addiction

This refers to a state in which the internet (smart phone) is overused and is prohibited from using the Internet, which causes disruptions in everyday life.

2) Problem solving

This refers to emotional, intellectual, and specific ability to solve problems of one's own through various services.

3) Self-efficacy

This refers to his/her own assessment of his/her ability to complete the task

4) Self-directed learning

This refers to the form of learning in which the learner himself or herself chooses and decides the entire course of education according to his or her will, from whether he or she participates in learning to setting goals and selecting education programs and evaluating education.

5) Interpersonal relations

This refers to the psychological relationship between the members of a group. It means that

any characteristic psychological relationship or interaction that is formed between members' mutual support while the group life continues, affects the adaptations or motivations of the members, and also affects the characteristics of the whole group.

Ⅱ. Methods

1. Research subject

This study used the survey method to look at the correlation study of the effect of smartphone addiction on the school life of college students. We collected a total of 120 questionnaires by surveying 120 college students attending M college located in the area of Changwon.

2. Research tools

1) Interpersonal relations

The interpersonal measurement tools used in this study were modified and enhanced by Kwon[6] and Jang[2] interpersonal relationships. It consists of 15 questions in total and was used as a four-point scale.

2) Problem solving

The measuring tools associated with problem solving used in this study were modified and supplemented by Lee[1] college student/adult problem solving measurement tools to find out the subject's usual problem solving abilities. It consists of 23 questions.

3) Self-efficacy

The measuring tools associated with self-efficacy used in this study were modified and supplemented by Lee[1] to identify the subjects' usual self-efficacy, using the social self-efficiency scale for college students. It consists of 43 questions.

4) Class participation

The measuring tools associated with the class participation scale used in this study were modified and supplemented by Jung[5] to identify the subjects' usual class participation scale.

5) Self-directed learning scale

The measuring tools associated with the self-regulating learning scale used in this study were modified and supplemented by Jung[5] to identify the self-regulating learning scale of the subjects.

3. Data analysis

This study used the SPSS statistics 20.0 program to analyze the collected data, and analyzed the data using the The collected data were analyzed using SPSS. Statistic 20.0, and used T-test and pearson's correlations.

Ⅲ. Results

1. General characteristics

The study involved a total of 120 people, 30 mens, 90 womens, 61 first graders and 58 second graders. Satisfaction with school life was 53 percent, smartphone use period was 90.0 percent over four years. Satisfaction after using a smartphone was 49.2 percent, In terms of "daily life impact,54.2 percent, The reason why it affects daily life is that the time spent on excessive smartphone was 25.8 percent respectively(Table 1).

Table 1.

	general characteristic	Total (N = 120)	
		Number	%
Gender	Male	30	25
	Female	90	75
Grade	1st grade	61	50.8
	2nd grade	58	48.3
School Life Satisfaction	very satisfaction	5	4.2
	satisfaction	41	34.2
	normal	64	53.3
	dissatisfaction	6	5.0
	great dissatisfaction	4	3.3
Smartphone usage period	~ 1 year	3	2.5
	1year~2years	2	1.7
	2years~3years	1	0.8
	3years~4years	6	5.0
	more than 4years	108	90.0
Daily use period of a smartphone	1hour~2hours	3	2.5
	2hours~3hours	19	15.8
	3hours~4hours	31	25.8
	4hours~6hours	37	30.8
	more than 6hours	30	25.0
Average monthly fee	20,000~40,000	21	17.5
	40,000~60,000	38	31.5
	60,000~80,000	33	27.5
	80,000~100,000	22	18.3
	more than 100,000	6	5.0
Smartphone User Motivation	the current trend	19	15.8
	various information search such as the news	8	6.7
	Helping with your work and studies	5	4.2
	communication	61	50.8
	etc	27	22.5
Most commonly used features on smartphone	a voice call/messenger	17	14.2
	net work searching	7	5.8
	music/movie	23	19.2
	game	4	3.3
	SNS	69	57.5
Satisfaction after using a smartphone	very satisfaction	50	41.7
	satisfaction	59	49.2
	general	11	9.2
	dissatisfaction	0	0
	very dissatisfaction	0	0
A satisfying part	Information acquisition and use as a simple web search became easier	57	41.7
	Broad networking through SNS services	31	25.8
	Helps relieve stress by utilizing games or various applications	23	19.2
	monetary effects through currency/text and discount coupons	2	1.7
	Better work efficiency or academic performance	0	0
Daily impact	effect	55	45.8
	no effect	65	54.2
(If you choose to influence your daily life)	Excessive smartphone usage time	31	25.8
	Become to passive personal relationation relation	1	8
	Excessive usage fee	2	1.7
	Personal health is worse, such as poor eyesight, headache	15	12.5
	Work efficiency or worse academic performance	6	5.0

2. Smartphone addiction

Smartphone addiction in the highest frequency of these statements was the “paid two to three times more for use than.”, “smartphone are more fun than with family or friends", “It's more convenient to talk on smartphone than to actually meet someone and talk”, “conversation via SNS is more convenient than talking directly to people"(Table 2).

Table 2. Smartphone addiction

contents	Means	SD
paid two to three times more for use than	3.53	.72
smartphones are more fun than with family or friends	3.43	.60
It's more convenient to talk on smartphone than to actually meet someone and talk	3.38	.70
Conversation via SNS is more convenient than talking directly to people	3.37	.70
feel like going to lose my world if don't use smartphone	3.26	.70
smartphone isn't next to you, you can't get your works all day	3.25	.67
can't do anything else because curious about what happened on SNS	3.23	.65

3. Interpersonal relationship

The highest frequency in interpersonal relationships is: "my relationship with other people is smooth," "to trust and accept when others express a positive feeling about me" "tend to understand other people's feelings well" and "my expression or attitude toward others is open"(Table 3).

Table 3. Interpersonal relationship

contents	Means	SD
my relationship with other people is smooth	3.13	.51
to trust and accept when others express a positive feeling about me	3.13	.51
tend to understand other people's feelings well.	3.10	.55
my expression or attitude toward others is open	3.02	.48
compassionate about other people's lives.	3.00	.41

4. Problem-solving ability

The most frequent question in problem-solving ability is: "to think positively and accept even if other people's opinions differ from mine" "if there's a problem, relate the causes of the problem that I've experienced before" "accept other people's criticism or advice if you can solve the problem well in the future" and "prioritize which of the various problem-solving methods is thought to be more important"(Table 4).

Table 4. Problem-solving ability

contents	Means	SD
to think positively and accept even if other people's opinions differ from mine	3.12	.53
if there's a problem, relate the causes of the problem that I've experienced before.	3.10	.52
accept other people's criticism or advice if you can solve the problem well in the future	3.05	.57
prioritize which of the various problem-solving methods is thought to be more important	3.00	.58

5. Self-efficacy

The highest frequency in self-efficacy, said, "feeling of being alone in the world" "I can't do anything right" "shy even with someone I know well" and "until now, I think my life has been a failure“(Table 5).

Table 5. Self-efficacy

contents	Means	SD
feeling of being alone in the world	3.31	.67
I can't do anything right	3.30	.66
shy even with someone I know well	3.25	.75
until now, I think my life has been a failure	3.22	.70
think others will make a fool of me	3.18	.76
can't stop feeling so depressed	3.05	.69

6. Class participation

The highest frequency in class participation is "perform the role of group activities faithfully" "trying to get into class" "given learning actions are carried out according to the instructions" and "eye contact and listening when a teacher or fellow student“(Table 6).

Table 6. Class participation

contents	Means	SD
perform the role of group activities faithfully	3.14	.52
trying to get into class	3.13	.57
given learning actions are carried out according to the instructions	3.04	.47
eye contact and listening when a teacher or fellow student speaks	3.01	.52

7. Self-control learning

The highest frequency in self-control learning, is: "when I study for the exam, I try to get various information about the exam from my friends" "arrange what you have learned in my own way" "I'll finish all my studies, even if it's boring and boring”, “what you learn at school will be useful for your life”(Table 7).

Table 7. Self-control learning

contents	Means	SD
when I study for the exam, I try to get various information about the exam from my friends	3.11	.57
arrange what you have learned in my own way	3.03	.62
I'll finish all my studies, even if it's boring and boring	3.02	.58
what you learn at school will be useful for your life	3.00	.55

8. Correlation of smartphone addiction, interpersonal relationship, problem-solving, self-efficacy, class participation, self-control learning

This study was related to Self-control learning and class participation, self-efficacy and interpersonal relationships, self-control learning and problem solving, self-efficacy and smartphone addiction.

Table 8. Correlation of smartphone addiction, interpersonal relationship, problem-solving, self-efficacy, class participation, self-control learning

		gender	grade	smartphone addiction	interpersonal relationship	problem-solving	self-efficacy	class participation	Self-control learning
gender	correlation	1	-.037	-.146	-.201*	.006	-.050	-.75	-.125
	P-value		.686	.111	.028	.947	.591	.416	.172
grade	correlation		1	-.178	-.027	-.080	.001	-.119	-.030
	P-value			.052	.770	.385	.994	.195	.742
smartphone addiction	correlation			1	.228*	.185*	.484**	.271**	.346**
	P-value				.012	.043	.000	.003	.000
interpersonal relationship	correlation				1	.330**	.605**	.460**	.420**
	P-value					.000	.000	.000	.000
problem-solving	correlation					1	.328**	.281**	.485**
	P-value						.000	.002	.000
self-efficacy	correlation						1	.453**	.462**
	P-value							.000	.000
class participation	correlation							1	.649**
	P-value								.000
Self-control learning	correlation								1
	P-value								

p*<0.05 p**<0.01

Ⅳ. Discussion

In this study, 120 students in the first and second year of college wanted to look at the impact of smartphone use on the school life of college students and affects smartphone addiction, interpersonal relationships, problem solving skills, self-efficacy, class participation, and self-control learning in the process.

Kwon[6] was explained 65.9 percent by self-respect, communication skills and smartphone addiction trends. Communication skills have been shown to be the biggest factor directly affecting interpersonal skills. Self-esteem, communication skills have a statistically significant effect on smartphone addiction trends, and have a significant impact on interpersonal skills. However, the interaction between self-esteem, communication skills and interpersonal skills did not pay attention to the intermediary effect of the smartphone addiction trend. This study showed significant effects of interpersonal and smartphone addiction, and interpersonal and self-efficacy. Jung[5] said that the direct amulet effect of smartphone-dependent use on learning satisfaction is not significant, not that it has no amulet effect. As we saw earlier, the dependent use of smartphone is indirectly affecting learning satisfaction.

This study showed a significant impact on effects of smartphone addiction, problem resolution, class participation, and self-control learning.

Ⅴ. Conclusion

First, The most frequent smartphone addicts showed that they paid "paid two to three times more for use than" .

Second, The highest frequency in interpersonal relationships was found to be "my relationship with other people is smooth".

Third, The highest frequency in problem-solving ability to think positively and accept even if other people's opinions differ from mine.

Fourth, The highest frequency in self-efficacy feeling of being alone in the world

Fifth, The highest frequency in class participation perform the role of group activities faithfully.

sixth, The highest frequency in self-control learning when I study for the exam, I try to get various information about the exam from my friends

Smartphone addiction, interpersonal relationships, problem-solving skills, self-efficacy, participation in classes, and self-control learning items are not only affected by one part, but also by the other.

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