

The Development of a Smartphone Addiction Prevention Program and its Evaluation for Young Women

Nayoung Choi¹

¹ Kyungdong University
815 Gyeonhwonro, Munmak, Wonju, Gangwondo, KOREA
[E-mail: choiny@kduniv.ac.kr](mailto:choiny@kduniv.ac.kr)

Abstract. This research investigated development a smartphone addiction prevention education program for young women and how it can affect smartphone addiction, knowledge and attitude. Data was collected from April 1st 2013 to May 10th of the same year and the education program was tested on fifty three young female students and faculty staff at a university. SPSS 21.0 program was used to compare the before and after smartphone addiction, knowledge and attitude scores with the t-test to analyze the differences. Although the smartphone addiction score($t=-2.41, p=0.016$) and the knowledge score($t=4.56, p=0.002$) had a statistically significant effect, the attitude score did not have a significant difference. Therefore, this research demonstrates that a smartphone addiction prevention education program can be effective for smartphone addiction and knowledge for young women in a university.

Keywords: Smartphone addiction, Prevention, Education, Young, Women

1 Introduction

1.1 Necessity of Study

The smartphone is different from other mobile or technical devices, as they are extensions of the human being[1]. The use of smartphone devices is a daily task nowadays. Mobile devices are available in a wide variety of types, including laptops, tablets, PDAs and smartphones. These devices differ in screen sizes, usage, and other characteristics, which leads to differences in use and usage experience[2]. The smartphone is a most popular mobile device, most people own a smartphone, it is commonly used and it is more affordable than a tablet. Smartphones are carried everywhere: in bed, at the restroom, at work, at restaurants, etc. Therefore, smartphone devices are different from other mobile or technical devices, as they are extensions of the human being[3].

Smartphone addiction is closely related to internet addictions because the features are similar[4]. Internet addiction mostly begins with habits such as the checking habit; digital addictions are often the result of using habits to relieve pain or escape from the reality[5]. There are several studies about smart phone addiction among adolescents[6]. However, related to studies regarding smart phone addiction among early adulthood are hardly found both domestically and abroad. Because these phenomena are recently spread, there are some articles about it [7] [8].

Therefore, this study is to test if the developing prevention education program for smartphone addiction is capable of having a significant effect on preventing young women from becoming addicted to using smartphones.

1.2 Purpose of Study

This study is to identify if developing of prevention education program can affect an smartphone addiction score, knowledge and attitude after prevention education program of smartphone addiction for young women in a university.

1.3 Definition of Terms

Smartphone addiction is a behavioral addiction that negatively interferes with a person's life. Smartphone addiction behavior can include an intense focus on the smartphone or a specific application, for example, checking, posting, or interacting on social media platforms [4]. If the smartphone or application will be removed from the addicted person, panic attacks or feelings of discomfort emerge [3].

2 Research Method

2.1 Research Procedure

The research was conducted from April 1st 2013 to May 10th 2013 at City W targeted at a certain university's young students and staffs with a significance level of 0.05, test power calculation of 0.80, and an effect size of 0.70. The G*Power 3.1 program was also used in this experiment for statistical power analysis. Therefore the final participants allowed were totaled in at thirty in the experimental group and thirty in the control group and at the end of the experiment, there were fifty three total subjects.

2.2 Analysis of Data

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 21.0. Descriptive statistics for mean and standard deviation were used. Before and after prevention education program, an average of smartphone addiction,

knowledge and skill taken per time period was calculated to get symmetric data then compared over the two time periods with t-test.

3 Results

3.1 Test of Hypothesis 1

‘There will be more differences in the degrees of pre-test and post-test smartphone addiction of experimental group treated with prevention education program than them of control group treated with nothing in young adult females.’

Since there was a significant difference in the experimental group($t=-2.41$, $p=.016$) and no significant difference in the control group($t=-0.38$, $p=.689$), hypothesis 1 was adopted.

3.2 Test of Hypothesis 2

‘There will be more differences in the degrees of pre-test and post-test knowledge of experimental group treated with prevention education program than them of control group treated with nothing in young adult females.’

Since there was a significant difference in the experimental group($t=4.56$, $p=.002$) and no significant difference in the control group($t=0.77$, $p=.378$), hypothesis 2 was adopted.

3.3 Test of Hypothesis 3

‘There will be more differences in the degrees of pre-test and post-test attitude of experimental group treated with prevention education program than them of control group treated with nothing in young adult females.’

Since there was no significant difference in the experimental group($t=1.24$, $p=.321$) and no significant difference in the control group($t=0.69$, $p=.407$), hypothesis 3 was rejected.

4 Discussion

The research was conducted to examine if a smartphone addiction prevention education program could have an educational effect for young adult females. In the research results, it was observed that the smartphone addiction score($t=-2.41$, $p=0.016$) and the smartphone addiction knowledge score($t=4.56$, $p=0.002$) had a statistically significant effect, however the attitude toward smartphone addiction score($t=1.24$, $p=0.321$) did not have a significant effect. Therefore, This research

demonstrates that a smartphone addiction prevention education program can be effective for smartphone addiction and knowledge of smartphone addiction for young women in a university

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