

Factors Influencing on SNS Addiction Tendency of University Students

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Abstract

Objectives: SNS (Social Networking Service) has many advantages, however, it also has shortcomings such as SNS overuse. In this paper, we shall see factors affecting on SNS addiction tendency of university students. **Methods/Statistical Analysis:** We collected data from university students in C province of Korea on October 1-30, 2015. They responded questionnaires of SNS addiction tendency, loneliness and secure attachment tendency. We gathered 248 answer sheets and analyzed 211 except for the incomplete one. We analyzed data through independent t-test, One-way ANOVA, Pearson's correlation coefficients and multiple regression analysis. **Findings:** Findings indicated that the mean score of SNS addiction tendency of the university students was 42.85. We analyzed data through independent t-test, one-way ANOVA, Pearson's correlation among the groups ($F = 7.094, p = .001$). SNS addiction tendency showed a significant correlation with loneliness ($r = .293, p < .001$) and secure attachment tendency ($r = -.410, p < .05$). SNS addiction tendency was significantly affected by secure attachment tendency ($t = -4.386, p < .001$) and loneliness ($t = 2.292, p < .05$). These variables explained 18.1% of SNS addiction tendency among university students. **Improvements/Applications:** Therefore, to reduce SNS addiction tendency of university students, it is required to develop psychological and social interventions to reduce their loneliness and to increase secure attachment tendency.

Keywords: Addiction Tendency, Loneliness, Secure Attachment Tendency, Social Network Service (SNS), University Students

1. Introduction

The Internet is used for information search or staying communicated to persons all over the world. Social Networking Site or Service (SNS) is a medium that a user can share personal story with real-life friends and others can also communicate concerns with each other¹.

SNS is Internet services to make or maintain human relationship by sharing information with others and expressing themselves on Internet². Recently, more and more people use to communicating through social networking service such as mini-homepage, blog, micro blog, Twitter, Facebook. SNS first started in 1997. It was founded on the idea that people are connected with everybody else³ and Facebook that the most popular current SNS was made in 2004, as a virtual community for

university students. Cyworld is probably one of the well-recognized Internet brands in Korea today.

It is estimated that there are 1.1 billion SNS users globally as Internet users increase rapidly⁴. In Korea, 55.1% of Internet users, who are over 6 years old, use SNS. With the development of Smart Phones, 9 out of 10 SNS users access to SNS via Smart Phones, which rapidly increase SNS use². The findings are similar in USA, that is, 55% of adolescents in America used SNS⁴. The noticeable reasons for SNS use reported that 91% of all social networking teens said to stay in contact with buddies and 72% use to make plans with friends, 49% use the sites to make new friends⁵.

SNS has many advantages such as information sharing and making and maintaining human relationships. However, it also has shortcomings such as fatigue, anxiety,

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interference on study and conflicts with acquaintances because of SNS overuse. A previous study reported that not only drugs but also human activities such as gambling, overeating, exercise, TV and computer games can addict people and such behavioral addiction has similar symptoms to drug addiction such as prominence, mood change, tolerance, withdrawal symptoms, conflicts and recurrence⁶. SNS addiction is one of these behavioral addictions¹. SNS addiction can be defined 'What disrupts everyday life with withdrawal symptoms and tolerance resulted from over-absorption to online relationships⁷. Terms like "Social Network Site addiction" and "Facebook addiction" have been recently used because SNS use has risen steeply in a brief space of time⁸.

Although studies on SNS addiction tendency are being progressed, the concept of SNS addiction is not well established and studies on SNS addiction have not been made much, as the history of SNS is relatively short.

According to the⁹, Internet addiction is classified into five different patterns (computer addiction, information overload, net compulsions, cyber sexual addiction and cyber relationship addiction). In a study of Korean university students, when classifying participants by addiction risk, general user group was 72.47%, potential risk group 20.52% and high risk user group 7.01%¹⁰. These results suggest that it is needed management and nursing intervention for risk group.

The prior researches have showed factors associated with SNS addiction. People who have positive collective self-esteem used SNS for intercommunication and social identity gratifications. While those who have negative collective self-esteem and individual identity were more likely to use SNS for social reward¹¹. Another research, loneliness was a significantly positive correlate with SNS addiction tendency in university students. When fear of intimacy was combined, SNS addiction tendency tended to be more affected by loneliness.

In other words, fear of intimacy of university students with high loneliness level had an important role in the SNS addiction tendency¹². Besides, SNS addiction tendency has the positive relations with loneliness and depression, while addiction tendency has the negative relations with interpersonal relationship¹³. In a research targeting middle and high school, there were positive correlation between smart phone addiction and attachment anxiety¹⁴ and also, secure attachment with parent was negative correlation with Smartphone addiction^{10,15}.

Thus, the present study attempted to identify factors and psychological mechanisms related to SNS addiction tendency of university students who have most frequently used SNS and to contribute to their mental health through the results of this study.

2. Research Method

2.1 Research Design

The present paper is designed a descriptive research to identify factors affecting on SNS addiction tendency of university students.

2.2 Data Collection

The participants for this paper were university students in C Province of Korea and the survey was conducted in 2015. 248 university students participated in the survey after informed consent. The required sample size was estimated by G*Power 3.1 program. The minimum required sample size was 138 with significance level (α) 0.05, power of test ($1-\beta$) 0.95, effect size (p) 0.3 and the number of predictors 5.

2.3 Measurements

2.3.1 SNS Addiction Tendency

SNS addiction tendency was measured with 'SNS Addiction Proneness Scale for College Students' developed by¹⁶ and its contents include four subscales; 1. Disturbance of adaptive life and control failure, 2. Preoccupation and tolerance, 3. Avoidance of negative emotions and 4. Virtual life orientation and withdrawal. This scale consists of 24 questions on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree) and the total score range is 24-96. Higher scores indicate a higher SNS addiction tendency. Cronbach's alpha for SNS addiction tendency in this study was .89.

2.3.2 Loneliness

Loneliness was measured using Korean-version Revised UCLA Loneliness Scales (RULS) prepared by¹⁷ through translating the RULS developed by¹⁸. This measurement consists of 20 questions on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree) and the total score

range is 20-80. Higher scores indicate a higher Loneliness. Cronbach's alpha for loneliness in this study was .94.

2.3.3 Secure Attachment Tendency

Secure attachment tendency was measured by early adult attachment style scale¹⁹. It was based on Experiences in Close Relationships (ECP)²⁰ and modified to suit for the purpose of this study. This measurement consists of 36 questions on a 7-point Likert scale (1 = strongly agree, 7 = strongly disagree). This measurement includes two-dimensions of avoidance and anxiety, higher scores indicated a lower attachment in the study of¹⁹ and however, high scores in this study indicated a secure attachment tendency. The total score range is 36-252 and Cronbach's alpha for secure attachment tendency in this study was .89.

2.4 Data Collection

We collected data on October 1-30, 2015. The participants of this study were the university students in C Province of Korea. We collected 248 questionnaires. 37 questionnaires are insincere or missing answers. Finally, we analyzed 211 answers.

Table 1. SNS addiction tendency according to general characteristics (N = 211)

Characteristics	Categories	n(%), M \pm SD
Gender	Male	100 (47.4)
	Female	111 (52.6)
Age (year)	Average	20.64 \pm 2.07
	18-19	73 (34.6)
	20-21	73 (34.6)
	22-23	43 (20.4)
	\geq 24	22 (10.4)
Study year	1 st	65 (30.8)
	2 nd	86 (40.8)
	3 rd	36 (17.1)
	4 th	24 (11.4)
Religion	Yes	97 (46.0)
	No	114 (54.0)
Attachment type	Security	95 (45.0)
	Preoccupation	24 (11.4)
	Dismissing-avoidance	41 (19.4)
	Fearful-avoidance	34 (16.1)

SNS connection frequency	Nearly each day	143 (67.8)
	3~5times per week	46 (21.8)
	\geq 3times per week	22 (10.4)

2.5 Data Analyses

The collected data were analyzed by SPSS/WIN 20.0 statistical program. We calculated means and standard deviations by descriptive statistics. We computed differences of mean by t-tests and one-way ANOVA and correlations among variables by Pearson's correlation coefficient. We used a stepwise multiple regressions for finding affecting factors of SNS addiction tendency.

2.6 Ethical Considerations

We explained the research objectives, potential risks, benefits and research procedures before starting the study to participants. They participated in the study with independent consent and signed a consent form.

2.7 Limitations

This study was constricted by convenience sampling, which limited generalization to a broad population.

3. Results

3.1 Participant Characteristics

The general characteristics of the participants are shown in Table 1. Of the participants, 100 students (47.4%) were male and 111 students (52.6%) were female and the mean age of them was 20.64 years. Also, 65 (30.8%) were freshmen, 86 (40.8%) were sophomores, 36 (17.1%) were juniors and 24 (11.4%) were seniors. As to religion, 97 (46.0%) were believers and 114 (54.0%) were unbelievers. By Attachment type, 95 (45.0%) of the participants were of security, 41 (19.4%) were of dismissing-avoidance, 34 (16.1%) of the participants were of fearful-avoidance and 24 (11.4%) were of preoccupation. By SNS connection frequency, 143 (67.8%) used their SNS nearly each day, 46 (21.8%) 3-5 times per week, 22 (10.4%) less than 3 times per week.

3.2 Descriptive Statistics for Variables

Descriptive statistics for SNS addiction tendency, loneliness and attachment are shown in Table 2. The mean

level of SNS addiction tendency was 42.85 ± 11.94 point (range 24-96 point), the lowest score was 24 point and the highest score was 73 point. The mean of loneliness was 33.76 ± 9.31 point (range 20-80 point), the lowest score 20 point and the highest score was 59 point. The mean of secure attachment tendency was 119.10 ± 24.41 point (range 36-252), the lowest 53 point, the highest score 190 point.

Table 2. Descriptive statistics for variables (N = 211)

Variables	Range	M \pm SD	Min	Max
SNS Addiction Tendency	24-96	42.85 ± 11.94	24	73
Loneliness	20-80	33.76 ± 9.31	20	59
Attachment	36-252	119.10 ± 24.41	53	190

Table 3. SNS addiction tendency according to general characteristics

Characteristics	Categories	SNS Addiction Tendency	
		M \pm SD	t(p)/F(p)/scheffe
Gender	Male	42.00 ± 12.53	-0.985(.326)
	Female	43.62 ± 11.38	
Age(year)	18-19	43.60 ± 11.27	0.405(.750)
	20-21	43.30 ± 12.47	
	22-23	41.60 ± 12.19	
	≥ 24	41.32 ± 12.26	
Study year	1 st	45.05 ± 10.95	1.115(.344)
	2 nd	42.16 ± 12.02	
	3 rd	41.19 ± 13.69	
	4 th	41.88 ± 11.30	
Religion	Yes	42.42 ± 10.12	0.493(.623)
	No	43.22 ± 13.32	
SNS connection frequency	Nearly each day ^a	44.59 ± 11.44	7.094(.001)** a, b>c
	3~5times per week ^b	41.22 ± 12.41	
	≥ 3 times per week ^c	35.00 ± 10.88	

3.3 SNS Addiction Tendency According to General Characteristics

Table 3 shows the SNS addiction tendency according to general characteristics. We didn't find any significant differences in gender, age, study year, religion. There were statistically significant difference ($F = 7.094$, $p = .001$)

between SNS addiction tendency and SNS connection frequency.

3.4 Correlation among Main Variables

Correlations among SNS addiction tendency, loneliness and secure attachment tendency are shown in Table 4. The SNS addiction tendency was a significant correlation with loneliness ($r = .293$, $p < .001$) and secure attachment tendency ($r = -.410$, $p < .05$).

Table 4. Correlation among main variables (N = 211)

	SNS Addiction Tendency	Loneliness	Secure Attachment Tendency
SNS Addiction Tendency	1		
Loneliness	.293*	1	
Secure Attachment Tendency	-.410*	-.476*	1

* $p < .001$

3.5 Factors Influencing SNS Addiction Tendency

We found the effects of risk factors on SNS addiction tendency by multiple regressions. Table 5 shows the participants' SNS addiction tendency was affected significantly by secure attachment tendency ($t = -4.386$, $p < .001$) and loneliness ($t = .2292$, $p < .05$) and these variables explained 18.1% ($F = 22.037$, $p < .001$).

Table 5. Factors Influencing SNS addiction tendency (N = 211)

Variable	B	S.E.	β	t	p	Adj. R ²
Constant	62.292	8.135		7.657	.000	
Secure Attachment Tendency	-.159	.036	-.327	-4.386	.000	.163
Loneliness	.213	.093	.171	2.292	.023	.181

$F = 22.037$, $p < .001$

4. Discussion

The present study suggests factors that affect SNS addiction tendency of university students. The current study indicated that SNS addiction tendency was affected sig-

nificantly by loneliness and secure attachment tendency. That is to say, as increased loneliness leads to SNS addiction and diminished secure attachment increased the SNS addiction tendency. This result is partly similar with prior studies^{10,12-15}.

Recently, social network services have increased by the development of internet technology and the spread of Smartphone's. Internet allows ones to search the good information or functional use, whereas, there is a rising amount of persons experiencing negative consequences due to an excessive use of SNS²¹. High risk group of SNS addiction tendency of Korean university students showed 7.01%¹⁰. This result suggests that it is needed nursing intervention for risk group. Moreover, it means that should be consider loneliness and attachment tendency in nursing care for risk persons by the results of present study.

In²² described attachment as initial relationship between infants and their caregivers plays a decisive role in development of the later. Attachment style is classified into two types, secure attachment and insecure attachment.

And one of secure attachment style is dependable and can be trusted in adversity and looks at positively about oneself. The prior research showed that positive relationships among SNS addiction tendency and secure attachment tendency²³ and also, attachment directly affected the addiction to Smartphone²⁴. Moreover, the prior study pointed out 'attachment style was relevant significantly to level of social media use'²⁵. Therefore, the current study is in line with the prior researches²³⁻²⁵.

Like secure attachment tendency, loneliness is a major factor on SNS addiction tendency of university students. The university students having high loneliness may be more likely to SNS addiction. Several studies with loneliness have found a significant positive relationship between SNS addiction tendency as well as internet addiction^{12,13,26}. Using SNS too much may interrupt the close relationships between individuals, which eventually lead to loneliness. On the other hand, lonely people can use the internet to create social relationship in a virtual environment²⁶. They may prefer the virtual environment in order to avoid the negative feelings of loneliness in reallife²⁷.

We cannot ignore or denial about the benefits of SNS use, however, unlimited use is harmful. Internet addiction has reported correlated psychological problems such as depression, aggression, impulsion, interpersonal relationships²⁸⁻³⁰. Controlling this issue is very important, particularly, for children and adolescents, university students. The persons suffering from internet addiction

show comparable symptoms like loss of control, withdrawal, development of tolerance, preoccupation, loss and negligence of interests or social relationships as well as negative consequences in real life³⁰. Therefore, SNS users should learn to deal with negative emotion such as loneliness or unpleasant feelings and should develop ability to regulate their online behavior. Moreover, they have to recognize that problems by unlimited use of SNS. Furthermore, to improve mental health or SNS addition symptoms of internet users, it is needed to recommend that unlimited use of SNS or Internet can cause serious health problem such as neck and back pain. In addition to, it should be considered loneliness and secure of attachment in intervention strategies for university students having SNS addiction tendency.

Based on the results, further studies should be explored deeply on SNS addiction prevention and associated factors. Additionally, in development of nursing intervention on SNS addiction, it is needed to consider psychological aspects and attachment tendency of SNS user.

5. Conclusion

The present study suggests factors that affect SNS addiction tendency of university students. The survey was carried out on October 1-30; 2015. The participants of this study were the university students in C Province of Korea. We gathered 248 answer sheets and analyzed 211 except for the incomplete one. We obtain the following main result. SNS addiction tendency was a significant correlation with loneliness($r = .293, p < .01$), secure attachment tendency ($r = -.410, p < .05$). SNS addiction tendency was affected significantly by secure attachment tendency ($t = -4.386, p < .001$), and loneliness ($t = .2292, p < .05$), and these variables explained 18.1% ($F = 22.037, p < .001$). We founded that the factors influencing on SNS addiction tendency of university students were loneliness and security of attachment. Based on the results, further studies should be explored deeply on SNS addiction prevention and associated factors. Additionally, in development of nursing intervention on SNS addiction, it is need to consider psychological aspects and attachment tendency of SNS user.

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