

# RELATIONSHIP BETWEEN COVERT NARCISSISM AND SNS ADDICTION IN PRE-SERVICE TEACHER: MEDIATING EFFECT OF INSECURE ADULT ATTACHMENT

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**Abstract**— This study is looking to find a way for the pre-service teacher to relieve SNS addiction and to positively change them. Also, covert narcissism and insecure adult attachment is a factor to predict SNS addiction. Accordingly, pre-service teacher's covert narcissism and the relation between SNS addiction is found as well as examining the mediating effect of insecure adult attachment in relation. For the purpose of this study, 446 pre-service teachers completed a battery of scales including the covert narcissism scale, SNS addiction scale, and insecure adult attachment scale. Results showed that covert narcissism did not affect SNS addiction. Secondly, anxiety attachment and avoidant attachment, from insecure adult attachment, has significant influence on SNS addiction. Lastly, the study found insecure adult attachments' mediating effect on the connection between covert narcissism and SNS addiction. Interventional implications of the current results are discussed.

**Keywords**— Covert Narcissism, SNS addiction, Insecure Adult Attachment, Pre-service Teacher, Mediating Effect

## 1. INTRODUCTION

Not only does digital devices become part of people's daily life, it helps to form relationships that builds their individual identity and influence the social environment. Especially, college students who are categorized as young adulthood, needs to establish their romantic relationships [1], they are most likely to use Social Network Service (SNS) to build cyber communities and their relationships.

As college students who hope to become a teacher mainly experienced social media recently, it helps them to understand teenager social media activity and represent their characteristics. Especially, in school, teachers not only convey information but they guide teenage students to establish their values and perspectives. Also, as a pre-service teacher, succeeding their study on personality and mental health of individuals can be a good role model to influence students. On this account, it is important for pre-service teacher to motivate themselves to develop as a mature careerist and to be conscious of the SNS addiction problem for their mental health and improve their personal quality by constant self-monitoring.

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Received: January 8, 2020

Reviewed: March 5, 2020

Accepted: April 1, 2020

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The symptom of SNS Addiction is cyber myalgia, over flow, obsessive usage of SNS. It indicates their psychological dependence and groups of people who are willing to continue their academics, professional, social network to online [2-4]. SNS addiction is worldwide phenomenon and in Korea, 83% of twenties use SNS and reported that about 8.4% is addicted to SNS [5].

The over use of SNS raises various forms of academic, emotional and social problems. The overview of the preceding research related to social problems, shows people addicted to SNS recognize less social support between relationships with other people. Also, it causes various form of problems in relationships [6,7]. In terms of emotional development, psychological problems such as loneliness, depression and anxiety, is heavily related to SNS addiction [8-10]. A significant factor that affected improvement is the quality of sleeping.

SNS addiction occurs by the interaction between genetic and environmental factors. Especially, studies are being developed to explain genetic factors through trait. If the tendency of narcissism was high, it is shown that they are more vulnerable to SNS addiction [11-13]. There are two types of narcissism: overt narcissism, where they have arrogance or haughtiness in the human relationship due to having grandiose of themselves to form privileged consciousness, and covert narcissism, where they have grandiose of themselves but they are hiding these lust for dominance, exploitative tendency, to be approved by the others and become the center of the world. People with covert narcissism want to show they are grandiose of themselves in SNS space and satisfy their perfectionist self-display [12].

Aforementioned Forming human relationships, keeping them and intimacy has a high relation to the attachment as it is a symbol of an individual. Also, it becomes the base for an individual to understand their environment, to form cognition of safety and danger, and form relative attitude and belief. As this study is targeting pre-service teachers, which is categorized as the beginning of adulthood. It measures their insecure adult attachment. Adult attachment styles are composed of anxiety attachment and orthogonality in avoidance attachment.

These attachments not only predict the stability of human relationships but it is also related to SNS addicted tendency [13, 14]. Recently, active attempts are progressing to find the relationship between SNS addiction tendency and attachment. Studies that targeted college students showed that when the quality of insecure attachment increases the interpersonal problem intermediates. Therefore, it makes an effect to SNS addiction [13]. Despite the fact that studies studying the factors affecting SNS addiction are significant, there is a lack of studies focusing on the tendency of SNS addiction, targeting pre-service teachers. This study is looking to find a way for the pre-service teacher to relieve SNS addiction and to positively change their covert narcissism and insecure adult attachment is a factor to predict SNS addiction.

Accordingly, pre-service teacher's covert narcissism, the relation between insecure adult attachment and SNS addiction, and to examine the mediating effect of insecure adult attachment in the relation. To this end, the structural equation model established in this study was demonstrated for those who are receiving pre-service teacher education at the university.

## **2. METHOD**

### **2.1. PARTICIPANTS**

This study was collected from pre-service teachers who are attending to four-years universities and taking pre-service education courses. It was surveyed by questioning them for 2 weeks. In the collected 500 copies of surveys a total of 446 people's (89.2%) research was used in the analysis, excluding 54 people who did not participate faithfully.

The ratio of male and female pre-service teachers was similar, 48.4% for male and 51.6% for female. By grade level, sophomore (37.9%) and junior (32.5%) are relatively high, while freshman (17.3%) and senior (12.3%) are relatively small. Also, 44.8% of them majored in education, and 55.2% did not major in education.

## 2.2. MEASURES

In order to measure covert narcissism, Akhtar and Thomson [15] invented a new tool which Gang and Chung [16] adapted Covert Narcissism Scale: CNS to clinical group. This scale has a total of 27 questions with 3 major subjects of factors which is 'desire for recognition-grandiose sense of self-importance (9 questions)', 'exploitation-egocentrism (9 questions)', 'timid-lack of self-confidence (8 questions)'. In this study, 7 questions are excluded through factor analysis and 3 major subjects of factors are reasonably sorted (factor results .503~.773). Internal consistency (cronbach's  $\alpha$ ) is shown through desire for recognition-grandiose sense of self-importance (.830), exploitation-egocentrism (.859), timid-lack of self-confidence (.782).

Revised version of Fraley, Waller and Brennan [17] scale is used to measure the degree of college student's insecure adult attachment. The scale is composed of two independent subclass classification factors of insecure adult attachment, 'anxiety attachment' and 'avoidance attachment' which it compose 18 questions each. Through factor analysis, it is reasonable to classify those to factors and 5 questions were excluded (factor results .505~.777). The value of cronbach's  $\alpha$  is shown through anxiety attachment (.920) and evasion attachment (.875).

Bergen Facebook Addiction Scale (BFAS) invented by Andreassen, Torsheim, Brunborg, and Pallesen [18], adapted and valid by Jo, Kim, and Song [19], is used for the tendency of SNS addiction. This scale is classified in 3 main factors, 'failure of regulating-difficulty of daily life', 'flow-tolerance', 'preference to virtual world-withdrawal' which is composed of 24 questions in total, except one question (factor results .562~.791). Internal consistency is failure of regulating-difficulty of daily life (.955), flow-tolerance (.889), preference to virtual world-withdrawal (.801).

## 2.3. ANALYSIS

Statistical processing of data collected for this study was analyzed using the SPSS and AMOS 24.0 programs. First, factor analysis of 3 measuring tools and internal consistency is calculated to identify reliability and validity of the questions. Second, frequency and percentage were calculated to identify the distribution of pre-service teachers under the survey. Third, the statistics described by the surveyed pre-service teachers were calculated to determine the level of covert narcissism, the level of insecure adult attachment, and the level of SNS addiction. Fourth, a structural equation analysis was performed to verify the research theories established to examine the causal relationship of endogenous covert narcissism, insecure adult attachment, and SNS addiction among them, and the mediated effects of insecure adult attachment were verified through bootstrapping. The significance level of the above statistical analysis and hypothesis verification was carried out in  $\alpha=.05$ .

## 3. RESULTS

### 3.1. DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES

In this study, we designed the covert narcissism in pre-service teachers as independent variables, and the SNS addiction variables as dependent variables. We wanted to examine the effects of insecure adult attachment mediations in the relationship between these variables. Descriptive statistics such as peak and maximum values mean and standard

deviation, and skewness and kurtosis, measured on a five-point recertification scale, are given in [Table I].

Table I. Descriptive Statistics of Research Variables (n=446)

Category		Min	Max	Mean	S.D	Skewness	Kurtosis
covert narcissism	exploitative-ego centrism	1.00	3.89	2.40	.64	.05	-.55
	oversensitiveness-weakness	1.00	5.00	2.78	.68	-.07	-.31
	timidity-lack of confidence	1.25	5.00	2.97	.62	-.09	-.03
insecure adult attachment	anxiety attachment	1.00	4.76	2.61	.61	-.03	-.21
	avoidance attachment	1.00	4.78	2.72	.51	.01	.89
SNS addiction	failure of regulating-difficulty of daily living	1.00	4.00	2.07	.82	-.86	.44
	flow-tolerance	1.00	4.33	2.24	.85	-.91	.20
	preference to virtual world-withdrawal	1.00	4.67	2.54	.98	-.96	-.12

All the variables in this study had connections to negative order that all average value of all variables were scored less than 3. Among them, timid-lack of self-confidence scored the highest with 2.97, meaning it is the most vulnerable sentiments. In addition, the average value of over sensitiveness-weakness (2.78), avoidant attachment (2.72), anxiety attachment (2.61) were higher than the mean.

On the other hand, the average value of SNS addiction was low. Failure of regulating-difficulty of daily life scored 2.07 which are lower than the average value as well as low-tolerance, which are 2.24. It states that failure of regulating-difficulty of daily life is most stable among the other.

Next, the dwarfism and the sharpness of the research parameters were evaluated. Dwarfs and kurtosis are intended to ensure that the researchers meet the normal distribution, and are generally considered to meet the normal distribution if the absolute value of the skewness and kurtosis is less than or equal to 3. An analysis of the dwarfism and the peak of the measurement variables showed that the absolute value of the dwarf and the peak was below 1, indicating that there was no problem in the assumption of normal distribution.

### 3.2. VERIFICATION OF RESEARCH MODEL

Structural equation analysis was performed to validate a study model designed to examine the causal relationship between pre-service teachers' covert narcissism and adult attachment and SNS addicts, and is presented in [Table II]. Fidelity of structural model is statistically significant at .000, TLI value of fidelity scale was .925, value of CFI was .951, in the range of acceptance, and adequate for study model.

Table II. Verification Result of Research Model

Route	Unstandardized Coefficients(b)	Standard error(S.E)	Standardized Coefficients(β)	C.R	p
covert narcissism → insecure adult attachment	1.424	.116	.998	12.245	.000
insecure adult attachment → SNS addiction	1.728	.696	1.266	2.484	.013
covert narcissism → SNS addiction	-1.365	1.007	-.700	-1.355	.175
covert narcissism → exploitative-ego centrim	1.000		.594		
covert narcissism → oversensitiveness-weakness	1.667	.155	.883	10.754	.000
covert narcissism → timidity-lack of confidence	1.184	.130	.712	9.124	.000
insecure adult attachment → anxiety attachment	1.000		.849		
insecure adult attachment → avoidance attachment	.509	.067	.520	7.570	.000
SNS addiction → failure of regulating-difficulty	1.000		.955		
SNS addiction → flow-tolerance	.912	.065	.807	13.952	.000
SNS addiction → preference to virtual world-withdrawal	1.031	.086	.722	11.956	.000

First of all, the verification results of the research theory 1 predicted that pre-service teachers' covert narcissism will have a positive effect on their SNS addiction as follows. However, the result of this study showed that covert narcissism did not significantly affect SNS addiction ( $B=-1.365$ ,  $C.R=-1.355$ ,  $p=.175$ ).

Next, we confirmed the second hypothesis assuming the mediating effect of insecure adult attachment in the relationship between covert narcissism and SNS addiction. As a result, insecure adult attachment was found to have a significant effect on SNS addiction in the form of complete mediation. As covert narcissism rises insecure adult attachment rises ( $B=1.424$ ,  $C.R=12.245$ ,  $p=.000$ ) and when insecure adult attachment rises SNS addiction rises as well ( $B=1.728$ ,  $C.R=2.484$ ,  $p=.013$ ). This result shows the strong influence of insecure adult attachment as a factor of SNS addiction.

#### **4. CONCLUSION**

This study proves covert narcissism and insecure adult attachment is a factor to predict SNS addiction, how insecure adult attachment affects it as mediated effect. Through this study, a way to overcome or positively change SNS addiction of pre-service teachers could be suggested.

First of all, covert narcissism did not affect on SNS addiction. This does not match with Kuss and Griffiths's study [2] where an increase in covert narcissism and also an increase in SNS addiction. It did not match the study result where desire for recognition and over-evaluation led to immersing themselves more to SNS. It means that covert narcissism does not develop in a short period of time and the argument of increase in an addiction to SNS leading to narcissism, is not logically valid. Kim & Kim's study [20] shows that pre-service teachers scored higher in restoration elasticity under labelled categories which is self-controllees, relationship with other, affirmation than other college students. This study suggests that pre-service teachers are relieving stress and anxiety [21] due to self-respectness, active and dynamic in their work, and living an energetic life.

Secondly, anxiety attachment and avoidant attachment, from insecure adult attachment, has significant influence on SNS addiction. This is the same result from previous studies where adult attachment of college student mediate human relationships and that it causes SNS addiction [13][14]. An individual who did not have stable attachment with their major fosterer, reacts sensitively on denial or separation, not expressing difficult emotions that themselves cannot understand and expressing these through impulsive action. Therefore, difficulties of negative emotion control make them immerse too much into SNS. Especially, pre-service teachers with anxiety attachment will obsess themselves into the relationship and have a higher chance of having SNS addiction because of negative self-implication.

Lastly, the study found insecure adult attachment's mediating effect on the connection between covert narcissism and social media addiction. Overall, the effects caused by this have shown to support the 'Attachment theory' [22]. The following investigation suggested that insecure adult attachment is strongly correlated with an individual's addiction to social media. Adding on, it suggested that further investigation on the patient's rejection sensitivity and an individual's personal attachment relationships, under the assumption that psychological counseling have taken place, is needed. Since professional educators teach diverse young individuals, not only those who are seeking to become a professional teacher should be skilled, but they also should be psychologically strong and stable in order to provide meaningful education. Considering this, preventing pre-service teachers from addiction to social media can possibly help to keep their positivity about their interpersonal relationships and mental health.

#### **5. DISCUSSION**

The results of this study suggest that it is important to examine the level of covert narcissism and insecure adult attachment prior to full-scale intervention of SNS addiction

college students. When a counselor consults an SNS addiction college student, he will have to target insecure adult attachment as a 'target' function, if he has a covert narcissism. This suggests the necessity for intervention in insecure adult attachment to the interpersonal technique for SNS addiction. The client reflects the fear of an intimate relationship or anxiety about the continuation of the relationship hidden behind the various conflicts that arise in interpersonal relationships. Also, conclusion is drawn that universities and educational facilities which are currently training teachers should come up with solutions that could possibly give a significant change in their addiction to social media.

This study has the following limitations. In the process of subject selection, instead of sampling the entire nation, the study limits its sample size as a portion of the region. As the subject of the study could affect the result, the study needs to select pre-service teachers from all over the country. Also, due to the limitation of self-report type questionnaire method, it is difficult to measure individual's characteristics and differences of SNS addiction tendency or insecure attachment. However, understanding the relationship between SNS addiction and covert narcissism using various methods such as qualitative study in the following research will allow to understand the topic in depth.

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