

# Anger Expression, Depression and Interpersonal ability of University Students Majoring in Nursing in Accordance with their Childhood Emotional Trauma

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## ABSTRACT

**Background/Objectives:** This study is a descriptive study conducted to identify the association between the childhood emotional trauma of nursing students and their depression, anger expression and interpersonal ability.

**Method/Statistical Analysis:** Data were collected from freshman and sophomore students majoring in nursing studies at three universities in the C region. A total of 205 copies of the questionnaire were analyzed.

**Finding:** An analysis of the difference according to whether the subject had emotional abuse showed no statistically significant difference in anger expression or interpersonal ability, but there was statistically significant difference in depression. An analysis of the difference according to whether they had experienced emotional neglect showed no statistically significant difference in anger expression, depression or interpersonal ability, but when subjects had experienced emotional neglect, their interpersonal ability had decreased.

**Improvements/Applications:** This study will help identify the degree of emotional trauma, depression, anger expression and interpersonal ability in university students to provide for more interest in and programs for emotional stability.

**Keywords:** Anger Expression, Depression, Interpersonal Ability, Childhood Emotional Trauma Experiences, Nursing Students

## Introduction

While there is awareness of the seriousness of physical or sexual abuse during childhood, there is less awareness of the scope of emotional abuse. Despite the share of incidence of emotional abuse being higher than other forms of abuse, it is not being addressed seriously [1]. Emotional trauma affects the development of children more than physical trauma [2]. University students who are in early adulthood are required to establish their self-identity and intimacy. Only when development tasks are achieved can intimacy be acquired, too. Interpersonal

issues can lead to distrust in others and hinder a positive life. This, in turn can have a negative impact on interpersonal relations and development of university students. Interpersonal relations and experience of childhood trauma are said to be highly correlated. Children who experienced abuse have more sensitive emotional responses, are more hostile and oppressed in interpersonal relations and can experience depression [3].

Anger occurs when one's internal border has been invaded or needs have not been met. It is a goal-oriented function but when it is unconditionally suppressed or expressed in extreme ways, it can lead to counter-productive behaviors of anger expression. Interest in anger has been increasing in recent years [4].

As such, this study seeks to review the degree of childhood emotional trauma, depression, anger expression and interpersonal ability of university students majoring in

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nursing and identify the association between these factors to provide a basic set of data on how these students can grow into healthy members of society.

The study seeks to review the degree of childhood emotional trauma, depression, anger expression and interpersonal ability of nursing students in university. Specific objectives are as follows.

1. The degree of childhood emotional trauma, depression, anger expression and interpersonal ability will be identified.
2. The difference in general characteristics, depression, anger expression and interpersonal ability according to whether the nursing student experienced childhood emotional trauma will be reviewed.
3. The correlation between childhood emotional trauma, depression, anger expression and interpersonal ability of university students majoring in nursing will be reviewed.

## Materials and Method

**Design of the Study:** This is a descriptive study conducted to review the degree of childhood emotional trauma, depression, anger expression and interpersonal ability of university students majoring in nursing and identify any correlation between these factors.

**Study Subjects:** Convenience sampling was used on university students majoring in nursing studies and enrolled in their freshman and sophomore years at three universities in the C region. The number of samples used was calculated based on Cohen's formula which is the G\*Power 3.1.9.2 program<sup>[5]</sup>. When the significance level ( $\alpha$ ) of 0.05, power ( $1-\beta$ ) of 95% and effect size ( $f$ ) of 0.15 were set, the minimum number of samples was calculated to be 135. A total of 220 copies of the questionnaire were distributed given the drop-out rate. Among the retrieved 207 copies (94%), 205 copies (93%) were used for final analysis after excluding those with insufficient responses.

## Research Tools

**Experience of Emotional Trauma During Childhood:** The CTQ (Childhood trauma Questionnaire) by<sup>[6]</sup> which was translated and revised by<sup>[7]</sup> was used as a basis to measure emotional trauma during childhood. This tool

consists of five categories of emotional abuse, emotional neglect, physical abuse, physical neglect and sexual abuse, with each category having five questions. In this study, the revised version of this tool by<sup>[8]</sup> which has 10 questions for emotional abuse and emotional neglect in the emotional trauma category was used. A 4 point Likert scale was used to measure emotional abuse or neglect experienced from parents or family members before age 18. A higher score indicates more exposure to abuse or neglect. In the study by<sup>[8]</sup>, the overall Cronbach's  $\alpha$  was .84, while Cronbach's  $\alpha$  for emotional neglect was .73 and Cronbach's  $\alpha$  for emotional abuse was .90. In this study, the overall Cronbach's  $\alpha$  was .88, Cronbach's  $\alpha$  for emotional abuse was .77 and Cronbach's  $\alpha$  for emotional neglect was .93.

**Depression:** To measure depression, the revised tool of BDI (Beck Depression Inventory) by<sup>[9]</sup> which was translated by<sup>[10]</sup> was used. This tool consists of 21 questions on the emotional, cognitive, motivational and physiological symptoms of depression. Each response is scored one to four points to make the total score range from one to 84 points. A higher score indicates a greater degree of depression. In the study by<sup>[11]</sup>, Cronbach's  $\alpha$  was .89. In this study, Cronbach's  $\alpha$  was .89.

**Anger Expression:** To measure anger expression, the scale of<sup>[12]</sup> which was revised to a Korean version by<sup>[13]</sup> was used. As sub-factors, anger suppression measures the psychological and behavioral process of hiding or suppressing anger. Anger expression measures the psychological and behavioral process of expressing anger towards an object or person. This tool consists of eight questions for each category, making 24 questions in total. Responses are measured on a 4 point Likert scale, with 'not at all' given one point and 'almost always so' given four points. Overall Cronbach's  $\alpha$  for<sup>[14]</sup> was .70, while Cronbach's  $\alpha$  for anger expression was .69, Cronbach's  $\alpha$  for anger suppression was .76, and Cronbach's  $\alpha$  for anger control was .79. In this study, overall Cronbach's  $\alpha$  = .83, Cronbach's  $\alpha$  for anger expression was .59, Cronbach's  $\alpha$  for anger suppression was .61, and Cronbach's  $\alpha$  for anger control was .60.

**Interpersonal Ability Scale:** To measure interpersonal ability, the Interpersonal Competence Questionnaire by<sup>[15]</sup> which was translated by<sup>[16]</sup> was used. This tool consists of a total of 40 questions measured on a four point Likert scale, with 'not at all' given one point and 'very much so' given four points. A higher score indicates

better interpersonal ability. At the time of development, Cronbach's  $\alpha$  was .82, while it was .86 in [17]. In this study, Cronbach's  $\alpha$  was .89.

**Data Collection and Procedures**

Data were collected from June to July, 2017 by visiting the department of nursing at three universities in province C, explaining the objective of this study and the process to the head of department and students, acquiring their consent and handing out a structured self-reported questionnaire. It took on average 15 minutes to fill out the questionnaire.

For ethical considerations, subjects were told that they can withdraw from the study at any point in time. A written consent form was acquired before proceeding with the study. It was also explained that to protect the privacy of subjects, collected data would be coded, only used for the study, and disposed of after a certain period of time. Confidentiality was also guaranteed. The advantages and disadvantages by taking part in the study were also explained. The contact information of the researcher was also given to subjects to minimize any issues.

**Data Analysis**

The collected data were analyzed using SPSS 20.0 (SPSS Inc, Chicago, IL, USA) as follows.

1. Analysis was conducted using the real numbers, percentage, mean and standard deviation to identify the general characteristics, childhood emotional trauma, depression, anger expression and interpersonal ability of the subjects.
2. To review the difference in general characteristics, depression, anger expression and interpersonal

ability according to childhood emotional trauma,  $\chi^2$  and t-test were used for analysis.

3. The correlation between childhood emotional trauma, depression, anger expression and interpersonal ability was analyzed using Pearson's correlation coefficients.

**Results and Discussion**

**General Characteristics of Study Subjects:** Of the total of 205 subjects, there were 35 male (17.1%) and 170 female (82.9%). Average age was 20.9 years. There were 86 subjects (42.0%) with a religion, while 119 subjects (58.0%) did not have a religion. In terms of number of co-habitants, 83 subjects (40.5%) answered three or fewer, 94 subjects (45.9%) answered four, and 28 subjects (13.7%) answered five or more. Twenty-one subjects (10.2%) had a monthly household income of two million Won or less, 72 subjects (35.1%) had a monthly household income between 2.01 million and 4 million Won, 82 subjects (40.0%) had a monthly household income between 4 million and 6 million Won, and 30 subjects (14.6%) had a monthly household income of 6 million Won or higher. In terms of childhood emotional trauma experienced, 141 subjects (68.8%) experienced emotional abuse, 64 subjects (31.2%) did not experience any. In terms of emotional neglect, 101 subjects (49.3%) had experienced, while 104 subjects (50.7%) had not <Table 1>.

A review of the difference in childhood emotional trauma according to general characteristics of subjects <Table 1> showed that there was a difference across genders depending on whether emotional abuse had been experienced ( $\chi^2=2.66, p=.078$ ), but this difference was not statistically significant. There was no difference according to whether emotional neglect had been experienced.

**Table 1: General Characteristics (N = 205)**

Characteristics	Categories	Total	Childhood Emotional Trauma					
			Emotional Abuse			Emotional Neglect		X <sup>2</sup> or t(p)
			No	Yes	No	Yes		
			n(%) or M ± SD	n(%) or M ± SD	n(%) or M ± SD	n(%) or M ± SD		
		64(31.2)	141(68.8)	104(50.7)	101(49.3)			
Gender	Male	35(17.1)	15(7.3)	20(9.8)	18(8.8)	17(8.3)	0.01 (.928)	
	Female	170(82.9)	49(23.9)	121(59.0)	86(42.0)	84(41.0)		
Age(years)		20.9 ± 4.48	21.04 ± 5.12	20.85 ± 4.18	21.14 ± 4.85	20.67 ± 4.08	-0.75 (.454)	

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Religion	Yes	86(42.0)	29(14.1)	57(27.8)	0.43 (.543)	39(19.0)	47(22.9)	0.91 (.340)
	No	119(58.0)	35(17.1)	84(41.0)		62(30.2)	57(27.8)	
Inmate (No.)	3>	83(40.5)	24(11.7)	59(28.8)	0.49 (.783)	40(19.5)	43(21.0)	0.25 (.882)
	4	94(45.9)	30(14.6)	64(31.2)		48(23.4)	46(22.4)	
	5<	28(13.7)	10(4.9)	18(8.8)		13(6.3)	15(7.3)	
Monthly income of family (10,000won)	200>	21(10.2)	7(3.4)	14(6.8)	0.45 (.958)	12(5.9)	9(4.4)	1.846 (.605)
	201~400	72(35.1)	22(10.7)	50(24.4)		32(5.6)	40(19.5)	
	401~600	82(40.0)	27(13.2)	55(26.8)		44(21.5)	38(18.5)	
	600<	30(14.6)	8(3.9)	22(10.7)		16(7.8)	14(6.8)	

**Difference in Anger Expression, Depression and Interpersonal Ability According to Childhood Emotional Trauma:** Anger expression of subjects scored 1.93 points which was lower than the average. In the sub-categories, anger control was the highest at 1.96 points, followed by anger suppression at 1.92 points and anger expression at 1.90 points. Depression scored 31.91 points which was higher than the average. Interpersonal ability, too was higher than average at 3.58 points <Table 2>.

The difference in anger expression, depression and interpersonal ability in subjects was as seen in Table 2. An analysis of the difference depending on whether emotional abuse had been experienced showed that there was no significant difference in anger expression

but there was statistically significant difference in the sub-category of expression ( $t=1.69, p=.091$ ). Depression had statistically significant difference ( $t=2.62, p=.009$ ), but there was no difference in interpersonal ability. An analysis of the difference according to whether emotional neglect had been experienced showed that there was no statistically significant difference in anger expression ( $t=2.01, p=.046$ ), while there was statistically significant difference in the sub-category of anger suppression ( $t=2.21, p=.028$ ). Depression, too, had significant difference ( $t=4.37, p<.001$ ), as did interpersonal ability ( $t=-2.96, p=.003$ ), indicating that when emotional neglect is experienced, there was a decrease in interpersonal ability.

**Table 2: Degree of the Variable of the Subject (N = 205)**

Variables	Categories	M ± SD	Childhood Emotional Trauma					
			Emotional Abuse			Emotional Neglect		
			No (n=64)	Yes (n=141)	t(p)	No (n=104)	Yes (n=101)	t(p)
			M ± SD	M ± SD		M ± SD	M ± SD	
Anger expression	Total	1.93 ± 0.36	1.88 ± 0.32	1.95 ± 0.38	1.28(.200)	1.88 ± 0.33	1.98 ± 0.38	2.01(.046)
	Anger display	1.90 ± 0.40	0.83 ± 0.34	1.93 ± 0.42	1.69(.091)	1.85 ± 0.37	1.95 ± 0.43	1.65(.100)
	Anger adjustment	1.96 ± 0.40	1.92 ± 0.40	1.97 ± 0.40	0.93(.351)	1.92 ± 0.37	2.00 ± 0.42	1.44(.149)
	Anger suppression	1.92 ± 0.42	0.89 ± 0.36	1.94 ± 0.45	0.81(.417)	1.86 ± 0.39	1.99 ± 0.45	2.21(.028)
Depression		31.91 ± 8.06	29.75 ± 6.85	32.90 ± 8.39	2.62(.009)	29.57 ± 6.09	34.32 ± 9.10	4.37(<.001)
Interpersonal relationship		3.58 ± 0.36	3.60 ± 0.36	3.57 ± 0.36	-0.54(.584)	3.50 ± 0.36	3.50 ± 0.36	-2.96(.003)

**Correlation between Childhood Emotional Trauma, Depression, Anger Expression and Interpersonal Ability:** An analysis of the correlation between childhood emotional trauma, depression, anger expression and interpersonal ability showed the results as seen in <Table 3>. There was a positive correlation between childhood emotional trauma and anger expression ( $r=.327, p<.001$ ), and with the sub-factors of anger expression ( $r=.269, p<.001$ ), anger control ( $r=.281, p<.001$ ), and anger

suppression( $r=.319, p<.001$ ). While there was a positive correlation with depression ( $r=.482, p<.001$ ), there was a negative correlation with interpersonal ability ( $r=-.185, p=.008$ ). of childhood emotional trauma, the experience of emotional abuse had a positive correlation with anger expression ( $r=.337, p<.001$ ) and its sub-factors of anger release ( $r=.302, p<.001$ ), anger control ( $r=.293, p<.001$ ) and anger suppression ( $r=.302, p<.001$ ).

It also had a positive correlation with depression ( $r=.375$ ,  $p<.001$ ) but did not have any correlation with interpersonal ability. The experience of emotional neglect had a positive correlation with anger expression ( $r=.237$ ,  $p=.001$ ) and the sub-factors of anger release ( $r=.174$ ,  $p=.013$ ), anger control ( $r=.201$ ,  $p=.004$ ) and anger suppression ( $r=.253$ ,  $p<.001$ ). Depression, too had a positive correlation ( $r=.451$ ,  $p<.001$ ). There was a negative correlation with interpersonal

ability ( $r=-.207$ ,  $p=.003$ ). Anger expression had a positive correlation with depression ( $r=.327$ ,  $p<.001$ ) but did not have any correlation with interpersonal ability. Depression had a negative correlation with interpersonal ability ( $r=-.222$ ,  $p=.001$ ). That is, greater childhood emotional trauma experience was correlated with a higher degree of anger expression and depression, and a lower degree of interpersonal ability.

**Table 3: Correlation between childhood emotional trauma, depression, anger expression and interpersonal ability (N = 205)**

Variables	1	2	3	4	5	6	7	8
1 Childhood emotional trauma	1							
2 Emotional abuse	.386**							
3 Emotional neglect	.888**	.490**						
4 Anger expression	.327**	.337**	.237**					
5 Anger display	.269**	.302**	.174*	.869**				
6 Anger adjustment	.281**	.293**	.201**	.901**	.678**			
7 Anger suppression	.319**	.302**	.253**	.894**	.643**	.728**		
8 Depression	.482**	.375**	.451**	.327**	.205**	.286**	.377**	
9 interpersonal relationship	-.185**	-.104	-.207**	.101	.120	.137	.015	-.222**

\*\* $p=.001$ ; \* $p=0.05$

### Conclusion & Suggestions

This study sought to identify the degree of childhood emotional trauma in university students majoring in nursing, their depression, anger expression and interpersonal ability, as well as correlation between these factors. Convenience sampling was used to select subjects from firstman and sophomore year students of nursing at three universities in the C region. A total of 205 copies were analyzed.

The findings show that 68.8% (131 subjects) had experienced emotional abuse, while 31.2% (64 subjects) had not. 49.3% (101 subjects) had experienced emotional neglect, while 50.7% (104 subjects) had not. As seen in this study, about half of the subjects experienced emotional abuse or neglect. Various studies seem to be needed on the depression, anger expression and interpersonal ability of university students who had had such an experience as a child.

In terms of difference according to whether one had experienced emotional abuse, there was statistically significant difference in anger expression which is a sub-category of anger. In particular, there was significant difference in depression. In terms of difference

according to whether one had experienced emotional neglect, there was statistically significant difference in anger expression, with significant difference found in the sub-categories of anger suppression, depression and interpersonal ability. As such, various programs and counseling should be considered for university students who had experienced emotional abuse or neglect.

Meanwhile, there was a positive correlation between childhood emotional trauma and anger expression, as well as with the sub-categories of anger release, anger control, and anger suppression. childhood emotional abuse had a positive correlation with anger expression and its sub-categories of anger release, anger control and anger suppression, as well as with depression. But there was no correlation with interpersonal ability. Depression had a negative correlation with interpersonal ability. That is, greater childhood emotional trauma was correlated with a higher degree of anger expression and depression and a lower degree of interpersonal ability. As such, various follow-up studies would be needed based on these findings of correlation.

This study was conducted based on data collected through convenience sampling from three nursing colleges.

As such, a more prudent approach to interpretation is needed. Follow-up studies with iteration and a wider sample are recommended. Studies are also suggested on the development and application of various programs for emotional well-being of nursing students in universities and verification of the benefits of such programs.

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**Source of Funding:** Self

**Conflict of Interest:** Nil

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