The Effects of Group Sandplay Therapy on Anger Control and Interpersonal Relationship Problems among University Students

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<**Abstract**>

This study analyzes the effects of group sandplay therapy on anger control and interpersonal relationship problems among university students. The subjects were 24 students from 1st to 4th grades at N University in Chungcheongnam-do. To determine the effectiveness of the group sandplay program, we subsequently conducted a one-way ANCOVA with SPSS 25 for both the experimental and control groups. We found the program to have significant positive effects on anger control and interpersonal problem improvement in the experimental group compared to the control group. The results lead us to conclude that group sandplay therapy is conducive to controlling the emotions and improving interpersonal relationships among university students.

Keywords : group sandplay therapy, anger control, interpersonal relationship problems, university students

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Ⅰ. INTRODUCTION

Anger is an essential emotion experienced during the course of human life. Experiencing and expressing anger is a natural response to stress.

In terms of the level of their psychological development, university students are in the stage of early adulthood. Young adults experience a great amount of confusion during this period of transition; it is more turbulent than any other stages of development in which one must achieve a range of development tasks and face various adaptation-related difficulties. Young adults are often stressed by the new roles they are expected to assume, which they have never experienced growing in an environment that strictly puts emphasis on going to a good university, and also by various adaptation-related issues caused by interpersonal relationships. Inadequate expression, control and regulation of anger during this period of life can lead to not only physical and mental issues but also interpersonal relationship problems.

In the hyper-complex modern world, university students often do not take their abilities, circumstances and emotions into account when trying to achieve their outer-life goals. In that process, they experience a sense of failure, low self-esteem, declined productivity and interpersonal relationship problems and also might develop negative symptoms like depression, anger and anxiety (Park et al., 1997). When they do not adequately resolve their anger or learn ways to cope with it, their behaviors can easily be influenced by momentary impulses, leading to a high probability of displaying emotional and behavioral problems. Primary causes of anger experienced in early adulthood are denial of self-assertion, restricted needs, unfair criticisms and remarks, nagging or disruption of activity (Kwon, 1995). In most cases, your adults repress the violent impulses arising from anger rather than acting out.

A 2017 analysis of key indicators of crime showed that "accident" accounts for the largest share of motives for murder at 42.8% (Korean National Police Agency, 2017). Most accidental killing cases are caused by the feeling of "anger." When people do not express their anger in an appropriate manner or cannot regulate it, they may be tempted to vent their anger on others or to eradicate the object of anger.

Spielberger et al. (1983) identified three general anger expressions: anger-in, anger-out

and anger-control. Anger-in is defined as redirection of the anger to the self, denial of thoughts or memories related to the situation that triggered anger, or denial of the emotion of anger itself. Anger-out is defined as expressing anger to another person or object in various ways including a physical act, criticism, insult, or verbal abuse. Anger-control is defined as making an effort to control and manage anger and express the feeling of anger while respecting the rights and emotions of the other person, using words that are not aggressive. These methods play an important role in social interactions, especially in interpersonal relationships (Campos, Campos & Barrett, 1989; Lemerise & Dodge, 1993), and thus are greatly influenced by a society's "rules on emotional expressions."

Everyone experiences anger in everyday life. However, the method of anger control varies from person to person depending on the level of intensity. Having a tendency of experiencing frequent anger is known as trait anger. People with high trait anger experience relatively low self-esteem (Kim, 2008; Seo, 2004; Anderson, 1994) and show higher narcissistic tendencies (Seo, 2004; Jo & Kwak, 2012). In addition, trait anger shows positive correlation with one's irrational beliefs (Kim, 2008) and a significant positive correlation with interpersonal relationship problems (Jeong, 2005; Lee, 2014). Both male and female university students are reported to experience trait anger at least once a week on average (Ryu et al., 2001).

According to Erik Erikson's stages of psychosocial development (1968), university students who are in their early adulthood form intimate and mature interpersonal relationships with others. Formation of smooth interpersonal relationships at this stage of development leads to the establishment of one's identity, development of healthy personality and satisfaction of human needs (Jo & Lee, 2013). Otherwise, young adults will experience psychological confusion including isolation and a feeling of void (Kwon, 1995) as well as depression, anxiety, anger and other types of negative emotions together with interpersonal relationship problems (Kim & Han, 2004; Park, 2004). This means that those suffering from interpersonal relationship problems feel lost and worthless, and can be sensitive to specific negative emotions (Arthur, 1998; Aseltine et al., 2002). In other words, people with high trait anger often perceive normal situations as those provoking anger, and thus are more prone to become angry (Spielberger et al., 1983). They tend to express such anger in inappropriate ways. The study of Deffenbacher et al.

(1990) also found that trait anger, compared to other emotions, is especially detrimental to interpersonal relationship.

Issues of anger control and expression is experienced by almost everyone. A healthy way of life is essential for maintaining one's emotional stability and harmonious relationship with others. For university students, it is often the case that their individualistic pattern of living make it difficult to express and share their emotions with other students in group activities. As a matter of fact, the biggest source of stress for Korean university students is interpersonal relationship, which accounts for 21.8%. (Jang, 2000).

A considerable number of university students in Korea suffer from stress stemming from interpersonal relationship and therefore experience not only psychological symptoms such as depression and anxiety but also physical symptoms. This phenomenon is not entirely unrelated to the culture of repression in Korea. When anger arising from interpersonal relationships is not expressed in an appropriate, positive manner and negative emotions build up for a long time as a result, it could cause mental and emotional disorder in the form of anxiety, depression and somatic symptoms could arise, especially in case of women (Park et al., 1997). In this regard, a positive meaning of anger control is that it helps overcome fear, which can be an obstacle in asserting what one wants. Therefore, it is important for university students to find appropriate solutions to their issues of interpersonal relationship and anger control. To this end, developing programs like group sandplay therapy to help university students overcome anger control and interpersonal relationship problems is highly necessary.

Sandplay therapy is a therapeutic intervention that incorporates sand with play, in which clients are involved in a process of creating images using sand, water and various figures in sand trays. Sandplay therapy allows clients to express their experiences and emotions through play, rather than verbal means. It is an effective way to express internal traumas that cannot be described verbally through images and physical senses (Jang, 2017).

Sandplay therapy is based on the premise that human beings have an innate tendency for self-healing of the psyche and development (Jung, 1960), which means that, given the right conditions, self-healing dynamics can occur in clients' inner world. Therapists would provide a "free and protected space" as described by Dora Kalff(1996) to facilitate self-healing from

clients' unconscious. Hence group sandplay therapy in this study would take a non-directed, half-structured approach.

Sandplay therapy is often more effective for group counseling rather than individual counseling. A "group" is not simply an aggregate of individuals. Members of a group are dynamically in interaction with each other to seek for changes (Kim & Jeong, 2002). Group therapy was first attempted to compensate for the limitations of individual therapy, and it has proven to be especially effective for resolving interpersonal relationship problems in terms of practicing social skills, experiencing cathasis and enhancing spontaneity (Seo, 2007). Group therapy often enables participants to model after the problem-solving methods and coping styles of other members and also reinforces their unique problem-solving skills.

Group sandplay therapy combines the nature of sandplay therapy, which is a unconscious process of self-healing, and the advantage of group therapy, which allows participants to realize trust, respect and others by building relationships (Sweeney & Homeyer, 2009). And when group members are around the same age who share multiple similarities, we can expect additional therapeutic effects. Focusing on relationships, group sandplay therapy assists participants to express their inner emotions and tell their stories with sand as the medium (Yoo, 2010). Making symbolic use of figures in sandplay therapy is helpful for anger control. Those who normally find it difficult to express their emotions can feel safe in expressing their anger during a sandplay process, as the world created inside a sand tray allows them to confront their inner pain and also to show the pain to the therapist indirectly (Kim, 2005). Therefore, group sandplay therapy is effective for treating anger control and regulation, which can usually trigger psychological resistance.

Group sandplay therapy is effective in increasing the spontaneity of individuals and forming new relationships in a social context, which provides various experiences where individuals can display a range of emotions including their expression, catharsis and sublimation. As a result, individuals are given the opportunity to recognize and express their inner anger.

Previous studies on group sandplay therapy mostly involve child participants. A few them do involve university students: The study of Lee (2010), which observed the effect of couple sandplay therapy on university students' ego differentiation and their satisfaction in

romantic relationship; the study of Kwak (2015), which explored the effect of group sandplay therapy on the level of depression in university students; the study of Choi (2010), which studied the relationship between adult attachment types and expression styles apparent in sandtrays; and the study of Lim (2016), which described a sandplay case of a male university student diagnosed with epilepsy. In other words, not enough studies have used group sandplay therapy for anger control and/or interpersonal relationship issues of university students.

This study is highly significant as it attempts to see the effectiveness of group sandplay therapy on anger control and interpersonal relationship problems of university students.

This study seeks to answer the following questions:

1. Is group sandplay therapy effective in enhancing anger control ability in university students?

2. Is group sandplay therapy effective in reducing interpersonal relationship problems in university students?

3. What process of change do university students with issues of anger control and interpersonal relationship undergo through group sandplay therapy?

Ⅱ. RESEARCH METHOD

A. Participants

Participants of this research were students from the Department of Child Welfare at N University in South Chungcheong province. Before the actual program was conducted, a pretest which administered the Korean version of the state-trait anger control scale (STAXI-K) and the interpersonal relationship problem scale (KIIP-SC) were administered to select the participants. Of the 269 volunteers, 24 who scored high at 8.92 were chosen. Among them, 12 who agreed to take part in group sandplay therapy were assigned to the experimental group 12, and those who did not agree or could not take part due to different reasons were assigned to the control group. Table 1 shows the general characteristics of all participants in

the experimental group and the control group. There was no significant difference between the two groups in terms of gender and school year. It should be noted that the participants were mostly female, given that they were from a department of child welfare where students are dominantly female.

Table 1. Characteristics of the Participants

Category		Experimental group (n=12)	Control group (n=12)	χ^2
		n(%)	n(%)	
Gender	Male	1(8.3)	0(.0)	1.00
	Female	11(91.7)	12(100)	
School year	Freshman	7(58.3)	6(50.0)	1.00
	Sophomore	1(8.3)	1(8.3)	
	Junior	3(25.0)	3(25.0)	
	Senior	1(8.3)	2(16.7)	

B. Measurement Tools

1) Anger control index (STAXI-K)

The study used the State-Trait Anger Expression Inventory Korean version (STAXI-K) to measure anger control. STAXI-K is an adaptation of the State-Trait Anxiety Inventory (STAI) invented by Spielberger et al. (1983), created by Jeon, Han and Lee (1997). The index has 24 items scored on a 5-point Likert scale. Scores range from 24 to 96, and higher scores indicate higher levels of expression of that particular anger.

A comparison of the STAXI-K scores between the two groups is outlined in Table 2. As shown below, there was not a significant difference between the experimental group (M = 2.41) and the control group (M = 2.45). In other words, the STAXI-K levels of the two group were homogenous.

Table 2. Comparison of the STAXI-K Scores Between Experimental Group and Control Group

Category	Experimental group (n=12)	Control group (n=12)	t
	M(SD)	M(SD)	
STAXI-K score	2.41(0.21)	2.45(0.26)	-.421

STAXI-K is comprised of three subscales of anger control: anger-in (8 items), anger-out (8 items) and anger-control (8 items). Item composition and reliability of the anger control index used in this study is exhibited in Table 3. As for reliability, Cronbach's α was .79 for anger-out, .79 for anger-in and .81 for anger-control.

Table 3. Item Composition and Reliability of the Anger Control Index (STAXI-K)

Subscale	No. of items	Item #	Cronbach's α
Anger-out	8	2, 7, 9, 12, 14, 19, 22, 23	.79
Anger-in	8	3, 5, 6, 10, 13, 16, 17, 21	.79
Anger-control	8	1, 4, 8, 11, 15, 18, 20, 24	.81
Total	24		.65

2) Interpersonal relationship problem index (KIIP-SC)

This study used Short form of the Korea Inventory of Interpersonal Problem: Circumplex Scales (KIIP-SC) to measure interpersonal relationship. As its name suggests, KIIP-SC is a shorter version of the Korea Inventory of Interpersonal Problem (KIIP) created by Kim, Jin, Jo, Kwon, Park and Hong (2002), which was adapted from the Inventory of Interpersonal Problem (IIP) by Alden et al. (1990). KIIP-SC has 40 items scored on a 5-point Likert scale ranging from 1 (Not at all) to 5 (Very). Higher scores indicate greater amount of difficulty one experiences regarding interpersonal relationships.

A comparison of the KIIP-SC scores between the two groups is outlined in Table 4. As shown below, there was not a significant difference between the experimental group (M = 2.23) and the control group (M = 2.36). In other words, the KIIP-SC levels of the two group

were homogenous.

Table 4. Comparison of the KIIP-SC Scores Between Experimental Group and Control Group

Category	Experimental group (n=12)	Control group (n=12)	t
	M(SD)	M(SD)	
KIIP-SC score	2.23(0.24)	2.36(0.29)	-1.227

This scale is comprised of eight subscales - Domineering/Controlling, Self-Centered, Cold, Socially Inhibited, Nonassertive, Overly Accommodating and Self-Sacrificing - and each subscale has 5 items (Table 5).

Table 5. Item Composition and Reliability of Each Subscale in the Interpersonal Relationship Problem Index

Subscale	No. of items	Item #	Cronbach's α
Domineering/Controlling	5	19, 21, 27, 30, 33	.68
Self-Centered	5	6, 7, 10, 13, 22	.88
Cold	5	2, 8, 9, 15, 18	.86
Socially Inhibited	5	4, 12, 17, 31, 36	.79
Nonassertive	5	1, 3, 5, 11, 16	.81
Overly Accommodating	5	14, 23, 34, 37, 39	.75
Self-Sacrificing	5	20, 24, 25, 32, 40	.81
Intrusive	5	26, 28, 29, 35, 38	.67
Total	40		.89

C. Research Procedure

Data for the research was collected through self-report questionnaires. The researcher paid a visit to the school of potential participants, explained objective of the study and asked for their participation. Before the questionnaire was handed out, the study's objective, time,

method and precautions were made clear to the students.

1) Pretest

Prior to the actual program, a pretest using a state-trait anger control index (STAXI-K) and interpersonal relationship problem index (KIIP-SC) was undertaken by the experimental and control groups.

2) Administration of group sandplay therapy

This clinical research provided group sandplay therapy once a week from September 11 to November 6, 2018. Each session was 120 minutes, and a total of eight sessions were given. The therapy took place in a sandplay therapy laboratory inside N University. With the consent of all participants, every session was recorded both in video and written format. Any changes in the participants' emotions, language expressions, behaviors and attitudes were closely observed.

As for the group composition, the study referred to the findings of Park (2012) as well as Yoo and Park (2011). There were three therapists (researchers) and twelve clients (university students) in both the experimental group and the control group. Then each group was further divided into sub-groups comprised of one therapist and four clients for group sandplay.

3) Posttest

After the clinical research program, a posttest was conducted with the same anger control index and interpersonal relationship problem index used for the pretest.

D. Data Processing

Data collected through a pretest and a posttest were analyzed using SPSS 25.0. First, the frequencies and percentages with regards to the general characteristics of the experimental and control groups were calculated, after which the chi-squared test was performed to check the significance. Lastly, to verify the effect of group sandplay on university students' trait anger

and interpersonal relationship problems - i.e., to confirm the accuracy of posttest results - analysis of covariance (ANCOVA) was performed by controlling the pretest results of both groups as covariates.

III. FINDINGS AND INTERPRETATIONS

A. Effect of Group Sandplay Therapy on University students' Anger Control

To answer the first research question, "is group sandplay therapy effective in enhancing anger control ability in university students?" the pretest and posttest scores were compared and ANCOVA was performed. The outcomes are in Table 6 and Table 7.

First, the anger-out level decreased for both the experimental group (Pretest M=2.27, SD=0.29; Posttest M=1.88, SD=0.44) and the control group (Pretest M=2.33, SD=0.40; Posttest M=2.24, SD=0.20). The experimental group's posttest scores decreased by a wider margin, indicating a difference between the two groups.

ANCOVA for posttest anger-out scores with pretest anger-out scores as a covariate showed, as elaborated in Table 6, that there is a significant difference between the experimental and control groups (F=6.305, p<.05). The outcome suggests that group sandplay therapy is effective in reducing the anger-out level in university students.

Table 6. Trait Anger Mean Score and Standard Deviation of the Experimental Group and the Control Group

Category		n	Pretest	Posttest
			M(SD)	M(SD)
Anger-out	Experimental group	12	2.27(0.29)	1.88(0.44)
	Control group	12	2.33(0.40)	2.24(0.20)
Anger-in	Experimental group	12	2.44(0.38)	2.10(0.40)
	Control group	12	2.58(0.46)	2.75(0.31)
Anger-control	Experimental group	12	2.47(0.31)	2.78(0.55)
	Control group	12	2.54(0.45)	2.41(0.21)

Table 7. ANCOVA Outcome for Anger Control

Category	Source of Variation	Sum of Squares	df	Mean Square	F	Significance Probability
Anger-out	Covariate (Pretest)	0.117	1	0.117	0.995	.330
	Between groups	0.739	1	0.739	6.305	.020[*]
	Error	2.460	21	0.117		
	Total	104.953	24			
	Corrected total	3.374	23			
Anger-in	Covariate (Pretest)	0.631	1	0.631	6.087	.022
	Between groups	2.737	1	1.368	13.202	.000[***]
	Error	2.176	21	0.104		
	Total	146.688	24			
	Corrected total	5.310	23			
Anger-control	Covariate (Pretest)	0.771	1	0.771	5.377	.031
	Between groups	0.951	1	0.951	6.634	.018[*]
	Error	3.009	21	0.143		
	Total	165.391	24			
	Corrected total	4.577	23			

[*] $p < .05.$ [**] $p < .01.$ [***] $p < .001$

Anger-in decreased for the experimental group (Pretest M=2.44, SD=0.38; Posttest M=2.10, SD=0.40), whereas it increased for the control group (Pretest M=2.58, SD=0.46; Posttest M=2.75, SD=0.31). There was a difference between the two groups in terms of anger control. ANCOVA for posttest anger-in scores with pretest anger-in scores as a covariate showed, as elaborated in Table 6, that there is a significant difference between the experimental and control groups (F=13.202, p<.001). The outcome suggests that group sandplay therapy is effective in reducing anger-in in university students.

The level of anger-control increased for the experimental group from pretest (M=2.47, SD=0.31) to posttest (M=2.78, SD=0.55), whereas it decreased for the control group from pretest (M=2.54, SD=0.45) to posttest (M=2.41, SD=0.21).There was a significant difference

for the experimental group in terms of its posttest anger-control scores. ANCOVA for posttest anger-control scores with pretest anger-control scores as a covariate showed, as elaborated in Table 6, that there is a significant difference between the experimental and control groups (F=6.634, p<.05). The outcome suggests that group sandplay therapy is effective in enhancing anger-control in university students.

B. Effect of Group Sandplay Therapy on University Students' Interpersonal Relationship Problem

The study also sought to answer the second research question: "Is group sandplay therapy effective in enhancing anger control ability in university students?" Pretest and posttest scores were compared and ANCOVA was performed, the outcomes of which are in Table 8 and Table 9.

First, the Domineering/Controlling level decreased for the experimental group (Pretest M=2.12, SD=0.39; Posttest M=1.28, SD=0.84) and also for the control group (Pretest M=2.12, SD=0.23; Posttest M=2.10, SD=0.13). However, the experimental group's posttest scores decreased by a wider margin, indicating a difference between the two groups. ANCOVA for posttest Domineering/Controlling scores with pretest Domineering/Controlling scores as a covariate showed, as elaborated in Table 8, that there is a significant difference between the experimental and control groups (F=12.912, p<.01). The result suggests that group sandplay therapy effectively reduces Domineering/Controlling level in university students.

The Self-Centered level decreased for the experimental group (Pretest M=1.78, SD=0.44; Posttest M=1.40, SD=0.54) but increased for the control group (Pretest M=1.91, SD=0.37; Posttest M=2.05, SD=0.12). Thus it was seen that group sandplay therapy was more effective for the experimental group than the control group in terms of Self-Centered level. ANCOVA showed that there is a significant difference between the two groups (F=15.262, p<.01). The result suggests that group sandplay therapy effectively reduces Self-Centered level in university students.

The Cold level decreased for the experimental group (Pretest M=2.15, SD=0.55; Posttest M=1.67, SD=0.96) and increased for the control group (Pretest M=2.72, SD=0.26;

Posttest M=2.77, SD=0.41). Thus it was seen that group sandplay therapy was more effective for the experimental group than the control group in terms of Cold level. ANCOVA however showed no significant difference between the two groups (F=2.095, p>.05). The result suggests that group sandplay therapy has little effect in reducing Cold level in university students.

Table 8. Interpersonal Relationship Mean Score and Standard Deviation of the Experimental Group and the Control Group

Category		n	Pretest	Posttest
			M(SD)	M(SD)
Domineering/Controlling	Experimental group	12	2.12(0.39)	1.28(0.84)
	Control group	12	2.12(0.23)	2.10(0.13)
Self-Centered	Experimental group	12	1.78(0.44)	1.40(0.54)
	Control group	12	1.91(0.37)	2.05(0.12)
Cold	Experimental group	12	2.15(0.55)	1.67(0.96)
	Control group	12	2.72(0.26)	2.77(0.41)
Socially Inhibited	Experimental group	12	2.18(0.37)	1.68(0.72)
	Control group	12	2.55(0.53)	2.50(0.54)
Nonassertive	Experimental group	12	2.28(0.32)	1.60(0.74)
	Control group	12	2.10(0.87)	2.22(0.66)
Overly Accommodating	Experimental group	12	2.33(0.48)	2.05(0.44)
	Control group	12	2.38(0.61)	2.52(0.69)
Self-Sacrificing	Experimental group	12	2.75(0.64)	2.33(0.27)
	Control group	12	2.60(0.60)	2.65(0.34)
Intrusive	Experimental group	12	2.23(0.41)	1.93(0.59)
	Control group	12	2.52(0.23)	2.43(0.22)

The Socially Inhibited level decreased for both the experimental group (Pretest M=2.18, SD=0.37; Posttest M=1.68, SD=0.72) and the control group (Pretest M=2.55, SD=0.53; Posttest M=2.50, SD=0.54). Posttest scores of the experimental group fell by a wider margin than that of the control group; the pretest effect was greater for the

experimental group in terms of Socially Inhibited level. ANCOVA showed that there is a significant difference between the two groups (F=4.942, p<.05). The result suggests that group sandplay therapy effectively reduces Socially Inhabited level in university students.

As for the Nonassertive level, it decreased for the experimental group (Pretest M=2.28, SD=0.32; Posttest M=1.60, SD=0.74), whereas it increased for the control group (Pretest M=2.10, SD=0.87); Posttest M=2.22, SD=0.66). Thus it was seen that group sandplay therapy was more effective for the experimental group than the control group in terms of Self-Nonassertive level. ANCOVA showed that there is a significant difference between the two groups (F=10.286, p<.01). The result suggests that group sandplay therapy effectively reduces Nonassertive level in university students.

Table 9. ANCOVA Outcome for Interpersonal Relationship

Category	Source of Variation	Sum of Squares	df	Mean Square	F	Significance Probability
Domineering/ Controlling	Covariate (Pretest)	1.489	1	1.489	4.803	.040
	Between groups	4.002	1	4.002	12.912	.002**
	Error	6.508	21	0.310		
	Total	80.680	24			
	Corrected total	11.998	23			
Self-Centered	Covariate (Pretest)	0.463	1	0.463	3.346	.082
	Between groups	2.113	1	2.113	15.262	.001**
	Error	2.907	21	0.138		
	Total	77.320	24			
	Corrected total	5.905	23			
Cold	Covariate (Pretest)	7.224	1	7.224	31.672	.000
	Between groups	0.478	1	0.478	2.095	.163
	Error	4.790	21	0.228		
	Total	137.200	24			
	Corrected total	19.273	23			

Table 9. ANCOVA Outcome for Interpersonal Relationship   (continued)

Category	Source of Variation	Sum of Squares	df	Mean Square	F	Significance Probability
Socially Inhibited	Covariate (Pretest)	3.744	1	3.744	15.559	.001
	Between groups	1.189	1	1.189	4.942	.037*
	Error	5.503	21	0.241		
	Total	117.800	24			
	Corrected total	12.798	23			
Nonassertive	Covariate (Pretest)	4.206	1	4,206	13.483	.001
	Between groups	3.209	1	3.209	10.286	.004**
	Error	6.551	21	0.312		
	Total	100.440	24			
	Corrected total	13.038	23			
Overly Accommodating	Covariate (Pretest)	2.624	1	2.624	11.715	.003
	Between groups	1.133	1	1.133	5.058	.035*
	Error	4.703	21	0.224		
	Total	133.760	24			
	Corrected total	8.633	23			
Self-Sacrificing	Covariate (Pretest)	0.452	1	0.452	5.710	.026
	Between groups	0.729	1	0.729	9.197	.006**
	Error	1.664	21	0.079		
	Total	151.720	24			
	Corrected total	2.718	23			
Intrusive	Covariate (Pretest)	1.553	1	1.553	11.403	.003
	Between groups	0.374	1	0.374	2.742	.113
	Error	2.860	21	0.136		
	Total	120.320	24			
	Corrected total	5.913	23			

$^*p < .05.$ $^{**}p < .01$

The Overly Accommodating level decreased for the experimental group (Pretest M=2.33, SD=0.48; Posttest M=2.05, SD=0.44) but increased for the control group (Pretest M=2.38, SD=0.61; Posttest M=2.52, SD=0.69). Thus it was seen that group sandplay therapy was more effective for the experimental group in terms of Overly Accommodating level. ANCOVA showed that there is a significant difference between the two groups (F=5.058, p<.05). The result suggests that group sandplay therapy effectively reduces Overly Accommodating level in university students.

The Self-Sacrificing level decreased for the experimental group (Pretest M=2.75, SD=0.64; Posttest M=2.33, SD=0.27) but increased for the control group (Pretest M=2.60, SD=0.60; Posttest M=2.65, SD=0.34). Thus it was seen that group sandplay therapy was more effective for the experimental group in terms of posttest Overly Accommodating level. ANCOVA showed that there is a significant difference between the two groups (F=9.197, p<.01). The result suggests that group sandplay therapy effectively reduces Self-Sacrificing level in university students.

The Intrusive level decreased for both the experimental group (Pretest M=2.23, SD=0.41; Posttest M=1.93, SD=0.59) and control group (Pretest M=2.52, SD=0.23; Posttest M=2.43, SD=0.22). The fact that the scores of the experimental group fell by a wider margin, however, indicated that group sandplay therapy is more effective for the experimental group in terms of posttest Intrusive level. ANCOVA showed no significant difference between the two groups (F=2.742, p>.05). The result suggests that group sandplay therapy has little effect in terms of reducing Self-Sacrificing level in university students.

Overall, the study confirmed that group sandplay therapy is effective in improving interpersonal relationship problems in university students.

Ⅳ. CONCLUSION AND DISCUSSION

A. Summary and Discussion

This study aimed to analyze the effect of group sandplay therapy for university

students in terms of alleviating their trait anger and improving interpersonal relationship problems. By controlling pretest outcomes for the experimental group and the control group as covariates, ANCOVA was administered for posttest outcomes. The study findings are as follows:

First, the study observed whether group sandplay therapy effectively reduces trait anger in university students and found that the experimental group's ability to control trait anger expression became better relative to the control group. Posttest ANCOVA outcome also indicated significant effect in terms of anger-out, anger and anger-control for the experimental group. These outcomes are in sync with the studies of Sweeney & Homeyer (2009) and Yoo (2010), which found that group sandplay therapy is effective in improving anger and interpersonal relationship problems. Thus the study verified that group sandplay therapy effectively alleviated trait anger expressions (i.e., anger-out, anger-in and anger-control) in university students.

Second, the study tried to verify whether group sandplay therapy has a positive impact on improving interpersonal relationship problem in university students. The experimental group saw their interpersonal relation problem improve after therapy. ANCOVA outcome indicated that there were significant, effective differences in the following subscales: Domineering/Controlling, Self-Centered, Socially Inhibited, Nonassertive, Overly Accommodating and Self-Sacrificing. However, there were no significant, effective differences in the subscale of Cold, Intrusive. For this particular subscale, the posttest result showed higher effect for the experimental group than the control group while no significant difference was indicated through ANCOVA. The outcome is perhaps affected by the differences between the two groups as indicated in the pretest result. In general, group sandplay had a significant effect on the experimental group rather than the control group in terms of their interpersonal relationship problems. This outcome is in sync with the study of Park (2004) which claimed that sandplay therapy is effective in improving interpersonal relationship.

Third, the study closely observed the sandplay process of the participants to verify group sandplay therapy's effect. Participants were shy and wary of each other at first, but as therapy progressed they became increasingly willing to discuss and share the experiences in their daily life. They would use their facial expression, gaze, body movement and so on to express

their difficulties in life. Trust was gradually established between participants and therapists, leading to increased anger control. The participants were able to freely express their emotions and paid more attention to the group members as they shared their similarities and difference with each other. Towards the end of therapy, the participants expressed their feelings of anger verbally and saw positive improvements in their interpersonal relationship. The study confirmed that group sandplay therapy helped the participants develop a positive self-awareness. In any human relationship, support and recognition from other members of the group play an important role in achieving emotional stability and development tasks. The group provides support like a family would, which gives emotional comfort to the individuals.

The first step towards resolving negative interpersonal relationships with other people is to understand oneself. It is very important to understand how one handles his or her anger in everyday life. It is equally necessary to know one's psychological tendency with regard to interpersonal relationship. Knowing the cause makes it easier to find a solution. The problem of anger control cannot be completely resolved through repression. And as for interpersonal relationship problem, it is difficult to expect any changes or growth when no change is made to one's life pattern.

Group sandplay therapy is helpful in expressing repressed anger in a safe and rational manner, correcting wrong anger-out methods and learning appropriate anger control methods. Anger control would be effective in bringing positive changes to interpersonal relationship problems, and improved interpersonal relationship problem pacifies negative energies like anger. Thus the two have a complementary effect.

Existing studies on group sandplay therapy mostly focused on depression and family-related problems in children and adults, hardly any studies. Hardly any studies observed the effect of group sandplay therapy on anger and interpersonal relationship problems in university students. In that respect, the fact that this study provides cases demonstrating the effect of group sandplay therapy on anger control and interpersonal relationship problem of university students has great implications.

B. Limitations and Suggestions

First, only one out of 24 research participants was a male student. This composition was inevitable as it had to select appropriate participants among those who volunteered. Future studies, however, need to balance the number of male and female participants.

Second, this was a clinical study that compared the difference of the effect of group sandplay therapy on anger control and interpersonal relationship problems between the experimental group and the control group. For further in-depth research, however, perhaps qualitative research methods like case study or phenomenological study ought to be used to observe the specific changes seen in participants at a deeper level.

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