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Group Art Therapy and Self-care for Mothers of Children with Disabilities

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A DISSERTATION

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Approvals

In the judgment of the following signatories, this Dissertation meets the academic standards that have been established for the Doctor of Philosophy degree.

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Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate School of Arts and Social Sciences.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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ABSTRACT

The purpose of this study was to examine the effectiveness of a group art therapy intervention on psychological well-being of Korean mothers of children with disabilities. This study employed a quasi-experimental pre- and post-test research design with non-random assignment of participants to either the art therapy intervention group (AG) or the control group (CG). The present study quantitatively examined the effectiveness of the group art therapy intervention using four standardized measurements (Parental Distress sub-scale from Parenting Stress Index-Short Form, Perceived Stress Scale, Beck Depression Inventory-II, & The Multidimensional Scale for Social Support) assessing parenting stress, perceived stress, depression, and perceived social support. In addition, the Draw-a-Person-in-the-Rain (the DAPR) assessment with numerical scoring system was used to assess the mothers' stress.

A total of 44 participants from multiple regions across Korea were included, and mothers in AG (n = 22) participated in 6 sessions of 100 minutes in length. The results of the statistical analysis showed significant differences between the two groups in parenting stress, perceived stress, and depression with those in the AG reporting a greater decrease in parenting stress, perceived stress, and depression than those in the CG. In terms of perceived social support, no significant difference was found between the AG and the CG. The results of the DAPR-Stress scale showed that stress indicators on the post-drawing assessment decreased significantly compared to the pre-drawing assessment after participating in the art therapy intervention. Thus, the art-based projective drawing assessment (the DAPR) supported the quantitative results of the art therapy intervention on decreasing stress. Overall findings support the effectiveness of the group art therapy

intervention in enhancing psychological well-being of Korean mothers of children with disabilities.

CHAPTER 1

Introduction

All parents experience stress in raising their children regardless of whether their children have disabilities (Crnic & Greenberg, 1990; Peterson & Hawley, 1998). Furthermore, growing numbers of studies have demonstrated that parents of children with disabilities differ in their levels of parenting stress depending on their children's diagnoses, severity of symptoms, or severity of behavioral problems (Estes et al., 2009; Hoffman, Sweeney, Hodge, Lopez-Wagner, & Looney, 2009; Samadi, McConkey, & Bunting, 2014). For example, mothers of children with autism spectrum disorders (ASDs) showed higher levels of parenting stress and psychological distress compared to mothers of children with developmental disabilities, Down syndrome, or other disabilities (Eisenhower, Baker, & Blacher, 2005; Estes et al., 2009). Moreover, many studies have reported that parents of children with disabilities were likely to report notably higher degrees of parenting stress compared to parents of children without disabilities (e.g., Ha, Hong, Seltzer, & Greenberg, 2008; Hoffman et al., 2009; Roach, Orsmond, & Barratt, 1999).

Further, much research has focused on mothers of children with disabilities rather than fathers of children with disabilities. One of the most consistent empirical findings in the research on gender differences in parenting children with disabilities is that mothers are more likely compared to fathers to perceive higher levels of parenting stress and depression and lower levels of psychological well-being and physical health (Brannen & Petite, 2008; Gerstein, Crnic, Blacher, & Baker, 2009; Oelofsen & Richardson, 2006; Pelchat, Bisson, Ricard, Perreault, & Bouchard, 1999; Veisson, 1999). Parenting stress of

mothers with disabled children can negatively affect their psychological and physical well-being, resulting in high levels of depressive symptoms, low self-esteem, physical fatigue, and psychosomatic symptoms (e.g., Brannen & Petite, 2008; Ha et al., 2008; Miodrag & Hodapp, 2010; Safe, Joosten, & Molineux, 2012; Veisson, 1999).

Based on a review of the literature, the treatments aimed at alleviating parenting stress and its adverse consequences available to mothers of disabled children include CBT-based psycho-educational parenting training programs; relaxation techniques, such as mindfulness-based stress reduction (MBSR); music therapy; and respite care services (e.g., Al-Khalaf, Dempsey, & Dally, 2014; Chan & Sigafoos, 2001; Conner & White, 2014; Fujiwara, Kato, & Sanders, 2011; Gika et al., 2012; Shechtman & Gilat, 2005). Most treatments aimed at alleviating maternal stress and its adverse consequences, such as depression have been in the form of parenting training programs that focus on teaching parenting skills, such as how to deal with the child's behavior, how to improve the parent-child relationship, or how to communicate better with the child.

The above-mentioned interventions for mothers of children with disabilities helped mothers manage their parenting stress and their physical and psychological health through focusing on the mother-child relationship and teaching parenting skills. However, other treatments, such as art therapy intervention, which focus more on the mothers' own needs, are needed to enhance mothers' well-being. Yet, research in this area is lacking. Therefore, the purpose of this study was to quantitatively investigate the effectiveness of a group art therapy intervention on enhancing well-being, more specifically decreasing parenting stress, perceived stress, and the level of depression, and

increasing perceived social support among Korean mothers who are raising disabled children.

Rationale of the Study

As a registered art therapist, I worked with children with disabilities in the Children's Development Research Institute in Seoul, Korea, from 2002 to 2005. During that time, I witnessed the positive effects of art on physical and psychological well-being of children with disabilities. I noticed increased parenting stress, social stigma, and lack of social and spousal support among primary caregivers of children with disabilities (the majority of whom were mothers). Furthermore, caregivers' well-being was mostly ignored, as the focus was always on disabled children's opportunities to receive therapeutic services to improve their well-being. In 2004, I conducted a one time, one-day art therapy (6 hours) session sponsored by the city of Seoul to promote these mothers' well-being. Ten mothers joined the art therapy session, and I still vividly remember the mothers' artwork and their verbal feedback on their lives as mothers of children with disabilities. One mother of a son with autism drew herself holding a big black rock on her shoulder and said that she would never get rid of this heavy rock unless she died or her disabled child died. Mothers in that group agreed that their biggest wish was to live one day longer than their disabled children because there was nobody to care for their disabled children other than themselves.

Now, more than10 years since my experience with these mothers, situation for these mothers in Korea have not changed much. According to the Korea Disabled People's Development Institute (2013), primary caregivers of children with disabilities in Korea spend on average 12 hours per weekday and 18 hours per weekend day caring for

their disabled children. This study also reported that most of these caregivers are mothers who often experience (a) depressive symptoms due to persistent parental stress, (b) guilty feelings associated with having a disabled child, and (c) family conflicts due to lack of time for their husbands and other children.

In addition, caregivers of children with disabilities in Korea are more likely to make harmful choices because of the almost unbearable burden of raising these children. Recently, many tragic incidents have occurred in Korea due to parenting stress and its effects of mothers' lives. For example, on February 27, 2015, one mother jumped to her death from the roof of a building with her son who had just been diagnosed with autism spectrum disorder (ASD). According to the mother's suicide note, she was not sure she could raise a disabled son and she felt great shame. She also wrote in her suicide note that she did not want her disabled son to live in Korean society where discrimination exists against disabled people and their families (Choi, 2015). Another incident happened on March 4, 2014. The mother of an 18-year-old girl with ADHD tried to kill her daughter with poison because she could not deal with the parenting stress. Fortunately, this mother changed her mind right after her daughter began to drink the poisoned beverage, and her daughter survived. According to the police investigation, this mother had lost her ability to reason when her daughter showed behavioral problems (Kim, 2014). Not only unbearable burden of raising children with disabilities, but also social stigma toward people with disabilities intensify mothers' parenting stress. Community members have strongly opposed the construction of a special school for children with intellectual disabilities in one of the towns in Seoul since 2013 because people in that town believe that facilities for people with disability, such as special school or Welfare center for

disability, negatively affect the quality of their residential life and decrease their house value (Kang, 2016). Moreover, this NIMBY (Not in My Back Yard) syndrome toward facilities for people with disabilities is widely spread in Korea, not just in this town (Lee & Lee, 2004). Therefore, mothers of children with disabilities in Korea very often experience severe stress from both carrying burden and social stigma.

Although the results of several interventions (such as CBT, Psycho-educational parenting training, MBSR, or verbal counseling) for mothers of children with disabilities showed positive effects on decreasing parenting stress and its consequences, other approaches may also be beneficial. Therefore, more studies are needed to "strengthen the evidence" that expressive therapies are effective in treating parenting stress for mothers of disabled children (Hastings & Beck, 2004, p. 1344). Based on the presentations given at the Arts Council England 2007, the creative arts play an important role in increasing individuals' health and well-being (as cited in Leckey, 2011). However, many interventions focus on treating the relationship between the mother and disabled child in order to enhance the disabled child's well-being, ignoring mothers' welfare. Other treatments teach the mothers coping skills necessary to deal with their children's behavioral problems, and in turn, decrease their parenting stress. Still, these treatments fail to address the mental status of the mothers (Ergöner-Tekinalp & Akkök, 2004). On the other hand, Ponteri (2001) asserts that Art therapy is an effective treatment for improving self-esteem and self-image among depressed mothers. In addition, Stone's (1982) qualitative research revealed that when mothers of children with autism participated in group art therapy, they experienced improvement in their self-esteem, sensory stimulation, and pleasure. Group art therapy may also be included with these

alternative strategies, as it is an effective therapeutic intervention for mothers of disabled children. Interaction with other persons who share their situation is effective in assessing one's own circumstances and coping skills.

For this reason, I conducted the pilot study, "Art Therapy and Self Care for Mothers of Disabled Children" in 2016. The purpose of this pilot study was to examine the effectiveness of group art therapy intervention for Korean mothers of disabled children on psychological and physical well-being and parenting stress. Few research studies have been conducted on Korean mothers of disabled children to investigate the effectiveness of group art therapy on mothers rather than their disabled children's needs. The pilot study was undertaken to quantitatively assess the effectiveness of group art therapy on mothers of disabled children using six standardized psychological instruments to measure the dependent variables of self-esteem (measured by RSEI; Rosenberg, 1965), parenting stress (PSI-SF; Abidin, 1995), life satisfaction (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), depression (BDI-II; Beck, Steer, & Brown, 1996), psychological distress (GHQ-12; Goldberg & Williams, 1988), and physical symptoms (PSI; Spector & Jex, 1998). Participants in both the art therapy intervention group (AG; n = 4) and the control group (CG; n = 7) were recruited from a private child developmental research center in Seoul, Korea. Participants in the AG and CG completed six measures pre- and post-intervention. Participants in the AG participated in a 90-minute group art therapy session for six weeks. Mothers in the AG showed greater changes in parenting stress, depression, psychological distress, and physical symptoms compared to mothers in the CG. Namely, mothers in the AG reported decreased parenting stress, less depressive symptoms, less psychological distress, and less physical symptoms after the

implementation of art therapy interventions. The results of this pilot study revealed that the overall changes in the scores of the six measures from the pretest to the posttest could indicate the potential effectiveness of group art therapy intervention for Korean mothers of disabled children.

Although the findings of my pilot study indicated that the group art therapy intervention may help mothers of disabled children enhance their psychological and physical well-being, the study had several limitations. One limitation was that the sample was not representative of all mothers of disabled children in Korea. The participants in the study were recruited from only one facility in Seoul, and they were all married and lived with their husbands. Therefore, for the main study, I tried to recruit mothers from more diverse backgrounds and from various facilities throughout Korea. A second limitation was the very small sample size. This prevented establishing a statistical group comparison between the art therapy group and the control group. Therefore, the main study investigated the effectiveness of art therapy intervention on mothers of disabled children using a larger sample. A third limitation of the pilot study was that the findings of the study relied solely on mothers' self-reported questionnaire responses; therefore, reporting biases could have influenced the results of the study. Therefore, this study incorporated an additional measure to assess mothers' parenting stress. The additional measure was a projective drawing assessment called "Draw-A-Person-in-the-Rain (DAPR)" with quantifiable scoring system.

Purpose of the Study

The purpose of the proposed study is to quantitatively investigate the effectiveness of a group art therapy intervention on Korean mothers of children with

disabilities using a larger sample and different measurements, such as Perceived Stress Scale (PSS), the Multidimensional Scale for Perceived Social Support (MSPSS) and the Draw-A-Person-in-the-Rain (DAPR) assessment. Specifically, the proposed study addressed the following two questions:

1. Is there a statistically significant difference in parenting stress, perceived stress, depressive symptoms, and perceived social support between the art therapy intervention group and the control group?
2. Is there a statistically significant difference between pre-scores and post-scores on stress indicators from the DAPR drawing assessment (the DAPR-Stress scale) in the art therapy intervention group?

The group art therapy intervention was expected to significantly decrease parenting stress, perceived stress, and depressive symptoms, and increase perception of perceived social support compared to the control group. In addition, it was anticipated that art therapy intervention will significantly decrease scores of stress indicators of the DAPR drawing assessment from the pre-test to the post-test.

Definition of Key Terms

Mothers of children with disabilities: For this study, mothers of children with disabilities refer to primary caregivers who assume the responsibilities of caring for their disabled children. Mothers come from two parent families, single parent families, biological, or non-biological (step-mother) families.

Children with disabilities: For this study, children with disabilities are defined as children between the ages of 4 and 13 with a diagnosis of Autism Spectrum Disorders (ASD), Developmental Delays (DD), Intellectual Disabilities, Specific Learning

Disorders, Attention Deficit Hyperactivity Disorder (ADHD), Anxiety Disorder, or Trauma and Stressor-Related Disorders, as defined in the DSM-V, and children with Down's syndrome and Cerebral Palsy.

Parenting stress: In this study, parenting stress is defined as "a condition or feeling experienced when a parent perceives that the demands associated with parenting exceed the personal and social resources available to meet those demands" (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009, p. 559).

Social support: Cohen (2004) defined social support as "a social network's provision of psychological and material resources intended to benefit an individual's ability to cope with stress" (p. 676). Cohen and Wills (1985) identified two types of social support, emotional support and instrumental support. Emotional support refers to the empathetic understanding and listening, concern for the welfare of a person, and affirmation of affection while instrumental support refers to the provision of needed help such as material support.

Art Therapy: American Art Therapy Association (AATA) defines art therapy as "the use of art media, the creative process, and the resulting artwork to explore feelings, reconcile emotional conflict, foster self-awareness, manage behavior and addictions, develop social skills, improve reality orientation, reduce anxiety and increase self-esteem". Art therapy is used "to improve (or restore) an individual's functioning and his or her sense of personal well-being" (AATA, 2013).

CHAPTER 2

Literature Review

This chapter examines literature on: (a) different levels of parenting stress and consequences of parenting stress; (b) non-art therapy interventions for parenting stress and well-being; (c) art therapy treatment for mothers with disabled children; and (d) the Draw-a-Person-in-the-Rain (the DAPR) drawing assessment.

Different Levels of Parenting Stress and Its Consequences

Definitions of Parenting Stress. Parenting stress has commonly been defined as "a condition or feeling experienced when a parent perceives that the demands associated with parenting exceeds the personal and social resources available to meet those demands" (Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009, p. 559). Deater-Deckard, Smith, Ivy, and Petril (2005) asserted that stress in parenting differs from stress in other aspects of life, such as work or spousal relationships. According to the authors, parenting stress is more closely connected with parenting behaviors and their children's developmental outcomes than stress from other domains of the parents' lives. In this sense, Abidin (1990) claimed that parenting stress of mothers with disabled children needed more attention because:

> The task of parenting is a highly complex one that often must be performed within a very demanding situation, with limited personal and physical resources, and in relation to a child who by virtue of some mental or physical attribute may be exceedingly difficult to parent. (p. 28)

Parents of Disabled Children and Parents of Non-Disabled Children. Many studies have reported that parents of disabled children were likely to show notably higher

degrees of parenting stress and negative well-being than parents of non-disabled children (see Ha, Hong, Seltzer, & Greenberg, 2008; Hoffman, Sweeney, Hodge, Lopez-Wagner, & Looney, 2009; Roach, Orsmond, & Barratt, 1999). In the following section, differences in parental stress and psychological well-being between parents of disabled children and parents of non-disabled children will be reviewed in depth.

Using a nationally representative probability sample of 296 parents with disabled children (*n* = 163 developmental problem; *n* = 133 mental health problem) and 1393 parents with non-disabled children, drawn from the MIDUS (Study on Midlife in the United States; Brim et al., 2004), Ha and colleagues (2008) investigated the differences in negative affect, psychological well-being, and somatic symptoms that parents in the three groups experienced. The findings revealed that parents of disabled children showed significantly higher degrees of negative affect and more somatic symptoms, and poorer psychological well-being, compared to parents of non-disabled children. They also found no gender differences in parenting stress or negative effects of the stress between mothers and fathers of disabled children.

This result is inconsistent with some previous studies (see Oelofsen & Richardson, 2006; Pelchat, Bisson, Ricard, Perreault, & Bouchard, 1999; Veisson, 1999) that found mothers of disabled children experienced significantly higher levels of parenting stress than fathers of disabled children.

Hoffman, Sweeney, Hodge, Lopez-Wagner, and Looney (2009) compared the parenting stress of mothers of children with autism to mothers of typically developing children: autism group (*n* = 104 mothers and their children) and community group (*n* = 342 mothers and their typically developing children). Mothers from each group

completed the Parenting Stress Index (PSI; Abidin, 1995), which consists of two sub-domains, the Child Domain (distractibility/hyperactivity, adaptability, reinforce parent, demandingness, mood, acceptability) and the Parent Domain (competence, isolation, attachment, health, role restriction, depression, spouse). Unlike previous studies on parenting stress, Hoffman et al. compared stress from the two domains separately. The findings revealed that mothers in the autism group reported significantly higher levels of parenting stress in both the Child Domain, F (6, 463) = 85.27, $p < .001$, and Parent Domain, F (7, 435) = 6.42, $p < .001$, than did mothers of typically developing children. The results of the present study can be interpreted to suggest that mothers of disabled children experience higher levels of parenting stress not only because of the difficulties associated with their children's disabilities, but also because of parents' own attributes, such as competence or isolation.

Similar findings with the study from Hoffman et al. (2009) were found with Korean mothers of children with disability. Using 110 mothers of children with disabilities and 80 mothers of children without disabilities, Kim and Kim (2014) conducted the quantitative study to examine the differences on parenting stress and coping behaviors, measured by Parenting Stress Index-Short Form (PSI-SF) and 15 items of Multidimensional Coping Behavior Scale. The results revealed that the mothers of children with disabilities experienced significantly higher level of parenting stress in all three domains of Parenting Stress Index, compared to the mothers of children without disabilities (t = -15.16, $p < .00$). In addition, there was a significantly difference in overall coping behaviors between mothers of children with disabilities and mothers of children without disabilities. Specifically, among 15 coping behaviors, significant differences

were found in nine coping behaviors (passive withdrawal, emotional expression, active forgetfulness, stubbornness, resignation, positive comparison, emotional relaxation, the pursuit of emotional support, and the pursuit of religious support).

In sum, parents of disabled children experienced more negative consequences, such as lower psychological and physical health compared to parents of non-disabled children. In addition, mothers of children with autism reported higher parental stress than mothers of typically developed children. In the following section, the effects of parental stress and well-being based on the specific diagnosis of the disabled child will be explored.

Children's Diagnoses and their Severity. Growing numbers of studies demonstrate that the levels of parenting stress among parents of disabled children differ according to their children's specific disability, severity of symptoms, or severity of behavioral problems (Estes et al., 2009; Samadi, McConkey, & Bunting, 2014). For example, mothers of children with autism spectrum disorders (ASDs) showed higher levels of parenting stress and psychological distress compared to mothers of children with developmental disabilities, Down's syndrome, or other disabilities (Eisenhower, Baker, & Blacher, 2005; Estes et al., 2009).

Using a sample of parents of three-year-old children with (n = 92) and without developmental delays (n = 133), Baker, Blacher, Crnic, and Edelbrock (2002) investigated the impact of children's cognitive delays and behavioral problems on their parents. Participants (mothers and fathers) completed the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), as well as the Family Impact Questionnaire (Doneberg & Baker, 1993), which is used to measure the "child's impact on the family

compared to impact other children his/her age have on their families" (p. 437). The results showed that children's behavioral problems more negatively impacted parenting stress than did children's cognitive functioning (F (2, 218) = 43.62, $p < .001$). Namely, children's behavioral problems were a stronger contributor to parenting stress than were the children's cognitive abilities. Similar results were reported by McStay, Dissanayake, Scheeren, Koot, and Begeer (2014) in examining Dutch parents of children with ASD (n = 138 mothers; n = 12 fathers), who found that children's disruptive behavioral problems, such as hyperactivity, was more significantly related to parenting stress than other characteristics of the child, such as social responsiveness ($\beta = 0.20$, $p = .05$).

With a sample of 121 parents of children with ASD and 115 parents of children with intellectual disabilities (ID) from Iranian families, Samadi, McConkey, and Bunting (2014) examined how children's diagnoses influenced parental stress, emotional well-being, and family functioning. Parents who were interested in participating in the studies were contacted by the first author by phone to make an appointment to complete study questionnaires. Participants completed three questionnaires at their homes in front of the researcher: General Health Questionnaire (GHQ; Goldberg & Williams, 1991), the Short Form of the Parenting Stress Index (PSI-SF; Abidin, 1990), and Family Functioning (Epstein, Baldwin, & Bishop, 1983). The findings indicated that parents of children with ASD experienced greater parenting stress (M_{ASD} = 117.61, SD = 17.44; M_{ID} =102.52, SD = 21.82) and lower levels of family functioning (M_{ASD} = 21.24, SD = 5.46; M_{ID} =14.50, SD = 5.91) than did parents of children with ID. Moreover, they found that mothers of children with ASD and ID (M = 13.45, SD = 8.1) showed poorer emotional health measured by GHQ than did fathers (M = 8.62, SD = 5.98).

In a similar vein, Seo, Chang, Jung, and Choi (2003) compared Korean mothers of children with ADHD (n = 29) to Korean mothers of children with emotional disorders (n = 19) and Korean mothers of non-disabled children (n = 36) in regard to parenting stress, depression, and parenting confidence. Mothers of children with ADHD and emotional disorders were recruited from psychiatric units in a university hospital, and mothers of nondisabled children were recruited from an elementary school in the same area. All participants completed four questionnaires: Parenting Stress Index-Short Form (PSI-SF), Beck's Depression Inventory (BDI), Parenting Sense of Competence (PSOC: Gibaud-Wallston & Wandersonman, 1978), and Personality Inventory for Children (Witt & Broen, 1958). Results indicated that mothers of children with ADHD showed a significantly higher degree of parenting stress and depression compared to mothers of nondisabled children, F (2, 81) = 12.787, $p < .05$. However, there was no significant difference in parenting stress and depression between mothers of children with ADHD and mothers of children with emotional disorders. Additionally, as to parent confidence, there was no significant difference among these three mothers' groups. Yet, non-randomized sampling, small sample size, and a specific area of recruiting limit support for generalization of the study's findings.

In sum, whether parents of children with autism or children with developmental delays, the child's behavioral problems, rather than cognitive functioning and emotional problems more strongly influenced their mothers and fathers parenting stress. Also, parents of children with ASD experienced higher parenting stress than parents of children with developmental delays.

Gender Differences in Parenting Stress and Well-Being. Much research has focused on mothers of disabled children compared to fathers of disabled children. This is because mothers are generally the primary caregivers of disabled children in two parent household. One of the most consistent empirical findings in the research on gender difference in parenting disabled children is that mothers are more likely than fathers to have higher levels of parenting stress and depression, and lower levels of psychological well-being and physical health (Gerstein, Crnic, Blacher, & Baker, 2009; Oelofsen & Richardson, 2006; Pelchat, Bisson, Ricard, Perreault, & Bouchard, 1999; Veisson, 1999). The following section will present how parental stress and well-being differs between mothers and fathers of disabled children based on children's disabilities.

Dabrowska and Pisula (2010) investigated the relationship between a parent's gender and child diagnostic group on parenting stress. The sample of this study included 51 heterosexual parents of children with autism (n = 26 mothers; n = 25 fathers), 54 parents of children with Down syndrome (n = 27 mothers; n = 27 fathers), and 57 parents of typically developing children (n = 28 mothers; n = 29 fathers). All participants completed Holroy's 66-item Questionnaire of Resources and Stress (QRS) for Families with Chronically Ill or Handicapped Members – short form that was used to measure parenting stress. QRS consists of 11 sub-scales such as *dependency and management, limits on family opportunities, life span care, family disharmony, financial stress,* or *personal burden for respondent*.

The findings (Dabrowska & Pisula, 2010) indicated that mothers with children of autism reported higher levels of parenting stress from three sub-scales, *dependency and management*, *limits on family opportunities*, and *personal burden for respondent* than did

fathers, F (2, 156) = 5.406, $p < .01$; F (2, 156) = 4.454, $p < .05$; F (2, 156) = 19.420, $p < .0001$, respectively. Yet, there were no gender differences in the levels of parenting stress among parents of children with DS and parents of typically developing children. This study is meaningful, because unlike many previous studies that used the PSI questionnaire to measure parenting stress, this study used the QRS for Families with Chronically Ill or Handicapped Members for measuring parenting stress for parents of disabled children. According to the researchers, the QRS is useful in "discriminating among various populations of parents of children with developmental disabilities, including parents of children with autism" (Dabrowska & Pisula, 2010, p. 270).

With a sample of 59 families (n = 39 fathers; n = 49 mothers) of preschool children with developmental disabilities (DD) and 45 families (n = 30 fathers; n = 40 mothers) of preschool children without, Oelofsen and Richardson (2006) investigated parents' gender differences in parenting stress and health of parents. All participants completed the Short Form of Parenting Stress Index (PSI-SF), and the Health Perceptions Questionnaire (HPQ), which relies on self-reported health status. Consistent with previous findings, both mothers and fathers in families of children with DD showed high degrees of parenting stress, with the scores (84% of mothers and 67% of fathers) from PSI-SF falling within the clinical range, while 5% of mothers and 10% of fathers from families of children without DD showed that their scores of parenting stress fell within the clinical range. The results also revealed that mothers of children with DD showed higher levels of parenting stress (M_{mom} = 105.9, SD = 16.4; M_{father} = 96.6, SD = 13.9) and poorer health (M_{mom} = 72, SD = 12.6; M_{father} = 78.7, SD = 8.2) than did fathers. However, there were no statistically significant differences in parenting stress and health between

mothers and fathers from families of children without DD. A non-random sample of self-selecting participants limits the generalizability of these results.

Using a sample of 50 parents of disabled children aged 4-10 years in Korea, Kim and Oh (2015) studied gender differences in parenting stress based on children's general characteristics (age, sex, diagnosis, communication ability, and gross motor function) and parent characteristics (educational level, number of children, monthly income). All participants completed the PSI-SF. Mothers of disabled children reported higher levels of parenting stress (M = 91.54, SD = 18.50) than fathers (M = 85.70, SD = 16.28), a finding consistent with previous research. This study also found that fathers of disabled children did not show statistically significant differences in parenting stress based on their children's characteristics, such as age, sex, diagnosis, and communication ability. However, fathers of disabled children differed according to their educational level; fathers with higher education reported less parenting stress than fathers with lower education (F = 5.036, p < .01).

On the other hand, for mothers of disabled children in this study (Kim & Oh, 2015) were significantly different in their parenting stress based on their children's characteristics such as sex (t = -.916, p < .05) and communication ability (F = 4.018, p < .05). Also, both education level and monthly income significantly influenced parenting stress of mothers with disabled children (F = 7.551, p < .001; F = 3.18, p < .05, respectively): mothers with higher education experienced less parenting stress compared to mothers with lower education; mothers with higher monthly income experienced less parenting stress than mothers with lower monthly income.

Therefore, this study (Kim & Oh, 2015) indicates that the educational level of mothers and fathers functions as a moderator of parenting stress; more highly educated parents of disabled children experience less parenting stress. Likewise, the household income of mothers with disabled children moderated their level of parenting stress; mothers with higher incomes experienced less parental stress.

In sum, the reviewed studies reveal that mothers of children with autism and developmental delays experience higher parenting stress than fathers. However, mothers of children with Down syndrome did not differ from the fathers with regard to the level of parenting stress. In addition, the results from the study using Korean parents with disabled children presented that parent-related variables such as educational level, monthly income, and child-related variables, such as the child's sex, age, diagnosis, and communication skills influenced the level of parenting stress of mothers, but not fathers.

Other Variables of Parenting Stress and Well-Being. So far, the studies that have been reviewed reported how the disabled child's diagnosis, the severity of the child's disability, and the gender of the parent of the disabled child were related to the parenting stress and well-being of the parents. In the following section, other variables that affect the degree of parenting stress, as well as the psychological and physical well-being of parents of disabled children, will be discussed.

Cho and Hong (2013) studied the quality of life of mothers with disabled children in Korea. They identified four variables that might affect quality of life: (1) children's variables (age and existence of multiple disabilities); (2) economic variables (monthly income and monthly treatment costs); (3) mother related variables (parenting stress); and,

(4) social variables (social support). In the study, 160 mothers of disabled children were recruited from major urban areas in Korea.

Participants completed four questionnaires: questionnaires for demographic information; the Beach Center Family Quality of Life Scale; a 30-item scale of social support; and, 52 items of the Questionnaire on Resources and Stress (QRS-F). Path analysis was used to find the direct and indirect effects of four variables on mothers' quality of life. The findings indicated that social support (β = .44, p < .001), child's age (β = -.12, p < .001), parenting stress (β = -.28, p < .001), and monthly income (β = .26, p < .001) had significant and direct effects on the mothers' quality of life. An interesting finding is that social support and monthly income directly influenced not only quality of life but also parenting stress. In other words, a higher degree of social support and a higher income lowered parenting stress and increased quality of life. Another finding is that existence of multiple disabilities in a child (β = .28, p < .001) and average monthly treatment costs (β = .22, p < .05) indirectly influenced a mother's quality of life through parenting stress. The strength of this study (Cho & Hong, 2013) is that it highlighted not only child variables but also other potential moderating variables, such as economics, mother related characteristics, and social variables that influence quality of life for mothers with disabled children. Also, this study provided a more complete picture of the relationship between variables through path analysis.

Using 51 dual-earner, married couples with disabled children, Warfield (2005) conducted quantitative research on the relationship between family/work variables and parenting role stress among working mothers and working fathers. For this study, participants were recruited from the longitudinal study of the Early Intervention

Collaborative Study (EICS). Parents were selected from EICS if they had a disabled child (with Down's syndrome, motor impairment, and developmental delays) and were from dual-earner families. Warfield identified three variables that can influence parenting role stress: family resources (household income, spousal support), parenting challenges (number of children, difficulty in finding reliable childcare, child characteristics), and work characteristics (work interest: whether their jobs are boring or interesting, work hours, and work overload).

Warfield (2005) found that number of children and degree of spousal support were significant predictors of parental stress in both mothers and fathers. However, diminished household income ($\beta = 11.77$, $p < .05$) significantly increased only the mothers' parenting stress. Also, they found that an interaction between child behavioral problems and work interest was a significant predictor of mothers' parenting stress ($\beta = 0.44$, $p < .05$), not fathers'. In other words, a mother with higher work interest and a disabled child with more behavioral problems reported higher parenting stress than fathers and mothers with children with fewer behavioral problems. An interesting outcome was that difficulty in finding reliable childcare was a significant predictor of fathers' parenting stress ($\beta = 9.18$, $p < .01$), but not that of mothers.

Consequences of Parenting Stress. Parenting stress of mothers and fathers with disabled children can negatively influence psychological and physical well-being, resulting in high levels of depressive symptoms, low self-esteem, and psychosomatic symptoms for parents (Ha et al, 2008; Safe, Joosten, & Molineux, 2012; Uskun & Gundogar, 2010; Veisson, 1999). The following two studies will explore the negative

consequences that parents of disabled children experience while they are raising disabled children.

In order to explore the daily experience of mothers of disabled children, Safe, Joosten, and Molineux (2012) analyzed in-depth semi-structured interviews with seven mothers of children with autism from Australia. Six Caucasian mothers and one Asian mother participated in this research with their autistic children, who ranged in age from 6 to 12 years old. The researchers identified themes of daily experience of mothers of children with autism: (a) a paradox of emotion; (b) the frustration of finding the right support; (c) mother as therapist; and, (d) "something's got to give" (p. 297). The mothers' paradoxical and fluctuating views and emotions toward their children were an on-going psychological battle creating lower psychological well-being for these mothers. Because of the lack of proper support and filling multiple roles, mothers of children with autism experienced excessive demands from their children, and it caused isolation and chronic physical fatigue.

Safe and colleagues (2012) concluded that the findings in their study indicated that support professionals needed to consider various aspects of daily life of mothers of children with autism when they created treatment intervention for these parents. In this study, reflexivity was achieved through identifying and examining the biases prior to data collection. Also, confirmability was achieved by providing readers with illustrative quotes from participants' interviews. Furthermore, credibility was established through triangulation (using multiple sources of data) and peer debriefing.

Uskun and Gundogar (2010) examined the relationship between the levels of stress of parents with disabled children and depression and anxiety. Participants were

recruited from a Special Education and Rehabilitation Center in Turkey, and a total of 127 parents completed two questionnaires: the Beck Depression Inventory (BDI) and Spielberg State Trait Anxiety Inventory (STAI). Also, the parents scored 10 possible stressful situations on a scale of 0-10 points, including: financial problems, having limited free time, and negative attitudes of society towards disabled people. The results indicated that 7 out of 10 stressful situations (such as financial problems, a decrease in relations with other people, having limited free time, negative attitudes of society towards disabled people, not to be able to participate in social activities, etc.) related to heightened depression. However, only three stressful situations – negative attitudes of society to disabled people, a decrease in relations with other people, and unable to meet the needs of one's disabled child – related to increased anxiety. A limitation of this study was that there was no control group, and the lack of a control group makes it impossible to compare the results with parents of non-disabled children. Another limitation is that the sample in this study (mostly parents of mentally disabled children) needed to include more parents of various groups of children's diagnoses to ensure validity of the results.

Non-Art Therapy Interventions on Parenting Stress and Well-Being

To date, only a few empirical studies of mothers of disabled children have examined treatment. The modalities studied have included psycho-educational parenting training, relaxation techniques, verbal counseling, and music therapy. In this section, various studies regarding treatment intervention will be presented.

Yildirim, Aşilar, and Karakurt (2012) investigated the impact of psychosocial education programs for mothers of intellectually disabled children on risk of depression and perceived family functioning. Originally, 90 participants were recruited from two

different private education and rehabilitation facilities in Turkey and were randomly assigned to either the experimental or control group. However, this study was carried out with 75 participants (n = 40 experimental; n = 35 control) due to incomplete participation in pre-/post- tests. Both groups of participants completed Beck's Depression Scale and Family Assessment Scale at the pre- and post-test. Participants in the experimental group participated in four psychosocial education programs for four weeks that lasted 120 min each. The psycho-education program consisted of four topics (communication techniques and coping with stress, effective problem solving methods, education about characteristics of intellectually disabled children, and social and legal matters for disabled children). Participants in the control group participated in routine special education center programs. Their findings demonstrated that mothers who participated in psychosocial education programs reported a statistically significant decrease in the risk of depression ($p < .001$) and an increase in healthier perception of family functioning when compared to the control group ($p < .001$). The limitation of this study is that only parents of children with intellectual disabilities were included, making generalization of results toward other types of children's disabilities limited. Nevertheless, the results of the study will provide valuable application into intervention for mothers of intellectually disabled children and their families.

Similar to the study by Yildirim et al. (2012), Al-Khalaf, Dempsey, and Dally (2014) conducted a quantitative study investigating whether an educational program for mothers of preschool age children with ASD could reduce the levels of parenting stress, and increase coping skills in mother-child interactions. Ten mothers were recruited from two private centers for children with disabilities in Jordan. The mothers participated in

four weekly, hour-long sessions of an education program conducted by the first author of this study. The education program was designed "to help mothers understand and cope with their child's behaviors and to reduce the stress caused by limitations in knowing how to prevent and manage the same" (p. 181). The mothers completed self-report questionnaires, the Coping Strategy Indicator Scale (CSI) and Parent Stress Index (PSI), at the beginning and end of the four weeks of the education program. The findings revealed that mothers' levels of parenting stress significantly decreased after participating in the education program (Z = -2.803, p = 0.005). Statistically, mothers' coping skills were significantly increased at the end of the intervention (Z = -2.803, p = 0.005). Although the results of this study demonstrated effectiveness of an education program for mothers of children with ASD, some limitations should be noted. A relatively small sample size (N = 10) limited support for generalization of the results. In addition, lack of a control group limited the credibility of the results.

Fujiwara, Kato, and Sanders (2001) investigated the effectiveness of the Group Positive Parenting Program (Group Triple P: a group-based family intervention program) using a sample of 115 mothers of children with behavioral problems (n = 91 mothers in the intervention group; n = 24 mothers in the control group). Specifically, this study examined the effectiveness of the Group Triple P on three aspects: (a) reduction in children's behavioral problems (measured by the Strength and Difficulty Questionnaire); (b) changes in dysfunctional parenting practices (measured by Parenting Scale); and (c) effects on parenting adjustment (measured by Depression-Anxiety-Stress Scale and Parenting Experience Survey). Intervention and control groups were assessed both pre- and post- intervention. They found that the group-based family intervention program was

positively related to the reduction of children's behavioral problems (t = -5.89 p < 0.001), dysfunctional parenting practices (t = -12.3, p < 0.001), and ratings for parenting adjustment (t = -5.03, p < 0.001) in the intervention group alone. This implies that Group Triple P is an effective way to reduce child conduct problems, dysfunctional parenting practices, depression, anxiety, stress, and the perceived level of parenting difficulty, as well as improving parenting confidence among Japanese families.

Gika et al. (2012) conducted a quantitative pilot study investigating whether relaxation techniques such as breathing and progressive muscle relaxation can decrease perceived stress and parental stress in mothers of children with autism. Eleven mothers (age range 36-50 years) were recruited from the autism clinic in a university child psychiatric department. Their children consisted of three girls with autism and eight boys with autism, age range from 4.5 to 17 years. The mothers had six weeks of relaxation training and were asked to practice at least 20 min of relaxation technique daily during these six weeks. The mothers completed self-report questionnaires, the Perceived Stress Scale (PSS-14), Parenting Stress Index (PSI/SF), and Vineland Adaptive Behavior Scales (VABS) at the beginning and end of the six weeks of relaxation training. The researchers found that the relaxation intervention reduced the mothers' perceived stress (Z = -.2.94, p = 0.003) and parental stress (Z = -2.94, p = 0.003). However, they found that the children's level of severity of impairment was not associated with the mothers' perceived and parental stress—a finding that varies from previous empirical studies. Because this was a pilot study, its small sample size might explain the surprising finding on severity of impairment. In addition, lack of a control group limited the credibility of the results. However, the researcher concluded that the study supported "the role of simple, easily-

administered relaxation techniques on reducing perceived stress in mothers of children with autism" (p.802).

Neece (2004) examined the effect of Mindfulness-Based Stress Reduction (MBSR), designed to reduce parent stress and in turn reduce child problems, in a sample of 46 American parents of children with development delays (n = 21 mothers in the experimental group; n = 25 mothers in the wait list-control group). The MBSR intervention consists of three components: (1) "didactical material covering the concept of mindfulness, the psychology of stress and anxiety and ways in which mindfulness can be implemented in everyday life to facilitate more adaptive responses to challenges and distress" (p. 179); (2) mindfulness exercises in the group and at home; (3) sharing experiences with group members. Participants completed seven self-reported measurement questionnaires at the pre-and post-intervention: PSI-SF, Family Impact Questionnaire (FIQ), Center for Epidemiologic Studies Depression Scale (CED-D), Satisfaction with Life Scale, Child Behavior Checklist (CBCL), and Subjective Units of Distress Scale (SUDS). It was found that: (1) parents who participated in MBSR showed less parental stress and depression, and increasing general life satisfaction; and (2) children whose parents attended MBSR showed fewer behavioral problems. This study investigated the underexplored reciprocal connection between parental stress and child problems, which was the main focus of the intervention. Although this study did not consider an active treatment control group to know whether MBSR has an advantage over other treatments, it was worthwhile to first examine the influence of intervention on parents, who have been largely ignored as a target of intervention that may influence children's behavioral problems.

Using a sample of 201 mother-child dyads from low income Australian families, Williams, Berthelsen, Nicholson, Walker, and Abad (2012) investigated whether a group music therapy intervention called *Sing and Grow* could increase positive parenting behaviors, parent mental health, and positive child behaviors. Data were collected via participating mothers' parental questionnaires pre- and post- intervention. Factors on the questionnaire included: parent mental health, parenting self-efficacy, parenting warmth, parenting irritability, activities with child, child behavioral problems, child communication, and child social play skills. Data were also collected via three clinicians' observation measures: parent sensitivity, parent engagement, parent acceptance, child responsiveness, child interest, and child social engagement.

The findings (Williams et al., 2012) indicated that parent mental health, child communication (t = -3.23, p = 0.000), and child social play skills (t = -2.96, p = 0.004) from mothers' self-reported questionnaires showed statistically significant improvement after music therapy intervention. On the other hand, all measurements of parental behaviors (for example, parent sensitivity; t = -14.2, p = 0.000) and child behaviors (for example, child responsiveness; t = -16.5, p = 0.000) from the clinicians' observation showed statistically significant improvement after music therapy intervention. Since the results of this study were predominantly from low income families, it can be generalized only to participants with similar demographic characteristics. Also, discrepancy between the results of the mothers' self-reports and the clinicians' observations were another shortcoming in this study. The researchers explained that insignificant results of mothers' self-report on the measure of parenting self-efficacy and child behavior problems may be "a result of ceiling effects in the measurement" (p. 39).

Art Therapy Interventions for Parenting Stress and Well-Being

In the above section, various empirical studies on education programs based on cognitive behavioral techniques (CBT) and relaxation interventions for mothers of disabled children were reviewed. In the following section, various art therapy interventions will be explored for mothers of disabled children. However, to date, only one art therapy intervention study for mothers of disabled children was conducted. Therefore, the other art therapy intervention studies that will be reviewed in the following section are from interventions for depressed mothers, mothers of sexually abused children, and mothers with postnatal depression.

Ponteri (2001) conducted a mixed-method study to investigate the effectiveness of group art therapy for depressed mothers and their children. Four mother-child pairs attended eight weeks of 90-min group art therapy sessions. Mothers completed a 20-item mother's questionnaire (MQ) to self-assess parenting skills and a Maternal Self-Report Inventory-Short Form (MSI-SF) that assessed maternal self-esteem. Participants' art works (drawings) were measured using the Formal Elements Art Therapy Scale (FEATS). The researcher also videotaped 20 min of a play session to assess mother-child interaction. The findings revealed that mothers who participated in the group art therapy reported more positive and assured self-report in MQ and the MSI-SF (self-esteem). Participants mentioned in their post-interview that the group art therapy helped them to recognize their strengths as a person. On the other hand, the analysis of drawings using FEATS scale revealed mixed results: some mothers drew more interactive and more confident depictions of mother-and-child in the drawings after participating in group art therapy while others created less interactive and less unified depictions. The small sample

size and lack of control group limited generalizability of these results. However, this study established triangulation through using multiple sources of data such as interview, questionnaires, and participants' art work.

Hagood (1991) conducted qualitative research investigating how group art therapy helped mothers of sexually abused children. She noted that mothers' psychological well-being is a key factor in overall treatment progress for sexually abused children. Participants were recruited from an ongoing art therapy group. Five to 12 mothers attended 13 weekly group art therapy sessions designed to facilitate increasing self-awareness, personal growth, and socialization with other mothers. The researcher concluded from observation of mothers and their art work that participating in group art therapy benefited these mothers of sexually abused children in the following ways: (a) the mothers became more sociable and interactive with group members through the group process; (b) the mothers developed greater self-awareness; (c) group art therapy provided a playful atmosphere for mothers. This study carefully described each group art therapy session in detail to allow readers to benefit from a broader understanding of the process of group art therapy for this population. However, the varying number of participants and lack of reporting of demographic characteristics were weaknesses of this study.

Arroyo and Fowler (2013) used a mixed-methods approach to study the effectiveness of a community-based art therapy painting group for mothers with postnatal depression (PND) and their children, investigating mothers' depression, confidence, self-esteem, and the quality of mothers' relationships with their infants. Participating mothers in this study were recruited at the children's center in South Wales in 2011.

The art therapy painting group ran for 20 weeks with a total of five mothers with PND and their children. Two mothers participated in the painting group with their husbands, one mother dropped out of the group, and the other two mothers ceased attending at the mid-point of the group study until they returned for the final group session. Data were collected via four mothers' questionnaires at pre- and post-intervention. Three questionnaires were used to measure mother's postnatal depression (Edinburgh Post Natal Depression Scale), mother's self-esteem (Self Esteem Evaluation), and relationship with their children (Relationship with Child Evaluation). Data were also collected via co-facilitators' clinical observation measures of the relationship between children and mothers' personal themes relating to "their underlying anxieties, concerns, and emotions" (p. 106).

Descriptive statistics of mean difference show that participants in the painting group obtained higher scores in self-esteem (M_{pre} = 2.5, M_{post} = 4.5) and relationship with children (M_{pre} = 6.25, M_{post} = 8.5) on the post-test compared to the pre-test. Also, it showed lower scores in postnatal depression on the post-test compared to the pre-test (M_{pre} = 18.25, M_{post} = 15.5). The results of paired samples *t*-test revealed a statistically significant increase in mothers' self-esteem scores from the pretest (t = -2.459, p = 0.046). However, the other two measures, mother's postnatal depression and relationship with child, did not show statistically significant change.

Data from co-facilitators' observations revealed that mothers in the group showed increasing positive interactions with their children toward the end of group participation. Also, expressing their feelings through paintings was observed. This study described each participant's overall experiences in the painting group in detail to allow the reader to

benefit from broader understanding of each participant. Thick description of participants' art work and participants' personal experiences in the group were strengths of this study. However, having a varying number of participants and the lack of reporting of demographic characteristics of mothers were weaknesses of this study. Also, the small number of participants (N = 4) and the nature of qualitative research prevent generalization of the results to the wider population.

Stone (1982) conducted a qualitative study exploring how art therapy provided increasing self-awareness, better understanding of relationships, social and sensory pleasure, and self-esteem for mothers of autistic children. Four mothers of autistic children attended 90 min of group art therapy for 13 weeks, but one mother dropped out of the group at the seventh session. The researcher found the following four themes throughout the group discussion: (a) the meaning for these women of being the mother of an autistic child; (b) "the discrepancy between their present self-image and what they felt they could be as individuals" (p.34); (c) the husband-wife relationship; (d) fear of the future. Stone also found general changes in participants' art work: better integration of emotions and feelings, greater acceptance of feelings, better integration of relationship, and heightened self-esteem.

Stone (1982) concluded that group art therapy for mothers of autistic children appeared to "facilitate communication, encourage spontaneity, and expression of feelings not usually considered by the group to be socially acceptable" (p. 47). Also, the researcher concluded that art making provided increased self-esteem, sensory stimulation, and pleasure for these mothers. Thick descriptions of participants' demographic characteristics, art work, and group processes were strengths of this study. However,

some limitations should be noted: (1) the researcher did not provide details of how participants were recruited; (2) there was lack of description of how participants' art work were analyzed, which impaired credibility of the study; (3) neither triangulation, peer debriefing, nor member-checking on interpretation of participants' art work were employed.

Lee and Peng (2017) used a mixed-methods approach to investigate the effectiveness of group art therapy on the emotional well-being and parental empathy for mothers of children with special needs in Hong Kong. Twenty-six mothers (11 mothers for the art therapy group and 15 mothers for the control group) were recruited. The goal of the group art therapy was to revisit the mothers' childhood and to review the relationship with their children. Participants in the art therapy group reported no statistically significant changes in their emotional well-being and parental empathy, as measured by the Brief Symptoms Inventory-18 (BSI-18; Andreu et al., 2008), the Parenting Stress Index-Short Form (PST-SF; Abidin, 1995), and Parent-Child Relationship Questionnaire (PCRQ; Furman & Giberson, 1995). However, qualitative analysis of therapy sessions, participants' artwork, and interviews revealed the potential benefits of group art therapy for mothers of children with special educational needs. In the interviews, the participants mentioned that participation in art therapy sessions helped them to reduce parenting stress and increase understanding of the needs of their children. The participants also reported that they experienced positive mood as the art therapy sessions neared to the end.

Throughout this review of art therapy intervention studies, it was found that depressed mothers could benefit from participating in group art therapy sessions,

including increasing self-esteem and self-awareness, and enhancing positive child-mother relationships. In the study of Arroyo and Fowler (2013), mothers' postnatal depression was decreased after participating in art therapy painting intervention sessions. Stone's (1982) group art therapy interventions for mothers of children with ASD revealed that art-based intervention provided increased self-esteem and provided a pleasurable experience for these mothers. Though some mothers from the reviewed studies in this chapter may not belong to the group of mothers of disabled children, all these populations experience some of the same symptoms, for example depression and parenting stress, related to the atypical circumstances of their children. The need for more research of art therapy based interventions for mothers of disabled children are essential. However, in lieu of such studies, I have applied the commonality of these mothers' predicaments to pose that art therapy intervention could help reduce parenting stress and increase the well-being of mothers with disabled children.

The Draw-a-Person-in-the-Rain (the DAPR) Assessment

Art-based, projective drawing techniques were developed as an alternative means of eliciting information about a person that might be hidden in an unconscious or preconscious level (Graves, Jones, & Kaplan, 2013). Betts (2006) claimed that art-based drawing assessment can provide concrete indicators of the drawer's (test-taker's) inner psyche in a non-threatening manner. The Draw-a-Person-in-the-Rain (DAPR) assignment is one of the art-based projective drawing assessments. Hammer (1958) stated that, "The Draw-a-Person-in-the Rain device attempts to get a picture of the body images under conditions of unpleasant environmental stress, as represented by the rain" (p. 398). Interpretation of the DAPR requires a quantifiable scoring system, such as Lack's Stress,

Resource, and Coping Capacity Scale (Lack-SRC, 1996), or Krom's (2002) rating scale, which focuses on how the subject (human figure in the drawing) reacts to unpleasant environmental stress. There are several ways to measure stress and coping resources in the DAPR, but the Lack-SRC scoring system is most frequently employed to measure stress and coping resources. In the following section, two studies employing the DAPR assessment will be reviewed.

Using a sample of 40 clients with dual diagnoses (psychiatric diagnosis and substance abuse disorder), Wills, Joy, and Kaiser (2010) investigated the relationship between the DAPR and the Coping Resource Inventory for Stress (CRIS). They also assessed the relationship between the DAPR and the Perceived Stress Scale (PSS-10).

In this study, 6 sub-scales from 15 sub-scales of the CRIS (The CRIS Self-Directedness Scale, Social Support Scale, Tension Control Scale, Structuring Scale, Physical Health Scale, and Confidence Scale) were used to measure the coping resources. Wills et al. (2010) employed Krom's DAPR rating scale to measure the DAPR stress indicators (such as large rain drops, puddles, dense rain, etc.) and the DAPR protection indicators (such as, a hat, a coat, an umbrella, etc.). The results are as follows: (1) the number of the DAPR protection indicators significantly correlated with the CRIS Self-Directedness; (2) there were marginally significant correlations between the DAPR protection indicators and the CRIS Confidence Scale and the CRIS Tension Control Scale; (3) the DAPR stress indicator did not correlate with either the CRIS or the PSS; and (4) there was marginally significant correlation between the DAPR protection indicator and Perceived Stress Scale (PSS-10). The findings in this study reveal that the

DAPR drawing technique is a promising projective tool to assess coping resources and protections against stress.

Kwon, Kim, and Song (2016) explored the responses of the DAPR assessment based on the subject's level of stress and the level of self-efficacy. They recruited 153 Korean nurses who worked at the hospitals in Seoul, Korea. The nurses completed the DAPR drawing, the Stress Response Inventory, and the Self-Efficacy Inventory, and their DAPR drawings were scored using the Lack-SRC scoring system. The nurses were divided into three groups, based on their stress scores (measured by the Stress Response Inventory) and self-efficacy scores (measured by the Self-Efficacy Inventory). Data from nurses in a high stress group and a low stress group were used to compare differences in characteristics of their DAPR drawings. Data from nurses in a high self-efficacy group and a low self-efficacy group were chosen to compare differences in characteristics of their DAPR drawings.

A significant difference was found in the DAPR stress indicators between nurses in a high stress group and nurses in a low stress group: nurses in a high stress group more frequently drew excess rain and rain touching the human figure in their DAPR drawing. They also found a significant difference in the DAPR resource indicators between nurses in a high stress group and nurses in a low stress group: the resource indicators were differently depicted in their DAPR drawings in terms of proper usage of an umbrella, facial expression, the size of human figure, and missing part of the body.

Based on the level of self-efficacy, there was no significant difference in the DAPR stress indicators between two groups. However, there was a significant difference in the DAPR resource indicators between nurses in a high self-efficacy group and a low self-

efficacy group in terms of proper usage of an umbrella, rain boots, other protections, and missing part of the body. The researchers concluded that this study showed the usefulness of the DAPR drawing technique in assessing the level of stress and self-efficacy of nurses.

Conclusion

Throughout this review of literature, it is evident that mothers of disabled children greatly suffer from the childcare demands of their disabled children, and it causes high degrees of parenting stress, adverse psychological well-being and somatic symptoms. If these mothers receive any treatment for their parenting stress and its adverse consequences, such as depression or somatic symptoms, it is mostly in the form of parent training programs. Previous research from art therapy studies provides encouraging evidence of the possible advantages of treatment intervention for these mothers. However, there are few studies that have specifically focused on art therapy intervention for this population. Therefore, empirical research needs to be conducted on the effectiveness of art therapy intervention for mothers of disabled children to fill in the lapses in reported treatment interventions, and to provide evidence of the effectiveness of treatment interventions for these mothers.

CHAPTER 3

Methods

The purpose of this study was to investigate the effectiveness of group art therapy on enhancing well-being of mothers who raise children with disabilities in Korea. This study used a quasi-experimental pre- and post-test research design with non-random assignment of participants to either the experimental group or the control group. It was not feasible to randomly assign research participants to either the art therapy intervention group (AG) or the control group (CG) because of the severely limited pool of participants whose interest and circumstances allowed them to participate in the six-weeks of art therapy sessions. Therefore, experimental group (AG) participants who fit the research parameters and were available to attend the six art therapy sessions were chosen. The control group (CG) consisted of those who were willing to participate but their schedules could not allow them to attend six weeks of art therapy intervention sessions. The pre- and post-intervention outcome measures (parenting stress, perceived stress, depressive symptoms, perceived social support, and a projective drawing assessment, Draw-a-Person-in-the-Rain) were used to determine the effectiveness of the group art therapy interventions. This study was conducted between January and April 2017 in four different regions throughout Korea.

Procedure

Upon the approval from the Lesley University Institutional Review Board (December 2016), the researcher contacted several directors (leaders) of facilities where research participants could be recruited. With the permission from the directors of the facilities, the recruitment flyers for this study were placed at several sites, such as

children's developmental centers, private therapy facilities, special schools, welfare centers for disabilities, and community-based welfare centers, throughout Korea for two weeks. Four facilities from four different regions throughout Korea were interested in participating in the study, and each facility decided the number of participants for the art therapy group (4 to 10 participants in a group) and the control group based on the availability of the participating mothers to attend six art therapy sessions.

While the recruitment flyers were posted at four facilities, the researcher recruited qualified art therapists who would lead six group art therapy sessions using personal contacts and referral from other art therapists. Two qualified art therapists were recruited, and the researcher trained these art therapists using an art therapy intervention manual (see Appendix K) that the researcher created for this study before the start of the art therapy sessions with participating mothers. The art therapists and the researcher were assigned to the art therapy intervention groups based on their geographical closeness or time availability because four facilities were spread out across Korea and each art therapy intervention group started its first session at a different time.

Participants in the art therapy intervention group took part in 100-minute group art therapy sessions conducted once a week for six weeks. During the first art therapy session, participants signed informed consent forms (see Appendix B), completed a demographic questionnaire, completed pre-test questionnaires (PSI-SF, PSS, BDI-II, MSPSS; see Appendix F), and completed the Draw-a-Person-in-the-Rain (the DAPR) before the group art therapy session. The participants in the art therapy intervention group also completed post-test questionnaires (PSI-SF, PSS, BDI-II, MSPSS) and the DAPR after the sixth art therapy session.

Participants in the control group received a package of questionnaires (PSI-SF, PSS, BDI-II, MSPSS), a demographic questionnaire, and the informed consent form with a return envelope during the week of the first art therapy intervention. Six weeks after the pre-test, the participants in the control group received the same questionnaires (PSI-SF, PSS, BDI-II, MSPSS) with a return envelope. During the six weeks of the study, the participants in the control group did not receive any type of therapy. After completing the pre- and post-tests, gift cards for $10.00 were given to the participants as an incentive for their participation.

Once all data from the art therapy intervention group and from the control group were collected, the researcher recruited an expert art therapist who could train the researcher and one of the qualified art therapist who facilitated art therapy intervention group how to score the projective drawing assessment, the DAPR. The expert art therapist provided four hours of training session on scoring the DAPR assessment. Three raters (the researcher, the expert art therapist, and the qualified art therapist) scored the DAPR assessment individually using a standardized scoring system developed by Lack (1997).

Participants

Mothers. Participants for this study were recruited via recruitment flyers (see Appendix A) from four different regions in Korea. The recruitment flyers for the intervention group included the criteria for participating in the six art therapy sessions. The inclusion criteria for mothers included:

- Participants had to be 20 years of age or older.

- Participants had to be Korean mothers who are biological mothers or step-mothers of children with disabilities.
- Participants had to be primary caregivers of the children with disabilities.
- Participants had to reside in the same household with at least one child with disabilities under the age of 13.
- Participants could not participate in another form of psycho-therapy treatment at the time of the study.
- Participants could not experience severe mental health issues, such as depression, anxiety, or PTSD, which require higher degree of professional care, at the time of the study.
- Participants had to be able to speak, read, and write the Korean language to complete the questionnaires.
- Participants had to be able to provide their own transportation to participate in the six art therapy sessions.

The mothers in the control group also satisfied the above criteria and expressed their interest to participate in the proposed study but could not come to the six- weekly art therapy intervention sessions.

Fifty-seven mothers showed interest in participating in this study and self-selected participation in the art therapy intervention group (n = 26) or in the control group (n = 31). However, four mothers in the art therapy group and nine mothers in the control group were dropped from the analysis because of discontinued participation in intervention group or refusal to complete post-tests, respectively. The final sample included 22 mothers (n = 22) in the art therapy intervention group and 22 mothers (n =

22) in the control group. Regarding the attendance rates, 20 mothers (91%) in the art therapy intervention group attended all six sessions and two mothers (9%) attended five sessions because of their children's therapy schedule.

Therapists. Two qualified art therapists (Therapist B & Therapist C) including the researcher (Therapist A) facilitated the group art therapy intervention. The researcher recruited qualified art therapists through personal contact and referrals from other art therapists. The inclusion criteria for qualified art therapists included:

- Qualified art therapists had to hold a Master's degree or higher (such as PhD) in art therapy or expressive therapies.
- Qualified art therapists had to have work experience as art therapists for at least two years after receiving their Master's degrees.
- Qualified art therapists had to have the ability to carry out six consecutive art therapy sessions in the art therapy intervention manual that the researcher provided.
- Qualified art therapists had to have the ability to speak, write, and read in Korean.

The two qualified art therapists completed one-day training workshop with the researcher regarding the art therapy intervention. During the training workshop, an art therapy intervention manual was provided for each qualified art therapist. The art therapy intervention manual included an informed consent form for the art therapist (see Appendix G), an informed consent form for participating mothers, a consent form for participants' artwork, copies of all outcome measures, guidelines for each art therapy intervention, and forms of session fidelity that served to make sure that qualified art therapists follow the art therapy intervention manual. In addition, one of qualified art

therapists (Therapist B) and the researcher underwent training on how to measure the art-based assessment of the DAPR conducted by the expert art therapist (Therapist D) after all data were collected. After receiving the training on scoring the DAPR assessment, the researcher (Therapist A), Therapist B, and the Therapist D scored the pre- and post-DAPR assessment for the art therapy intervention group individually. Demographic characteristics of the participating art therapists are summarized in Table 1.

Table 1

Demographic Characteristics of the Participating Art Therapists

	Therapist A	Therapist B	Therapist C	Therapist D
Age	Mid 40s’	Early 50s’	Mid 40’s	Late 30s’
Gender	Female	Female	Female	Female
Education	Doctoral candidate in Expressive Therapy (ET)	Doctoral candidate in ET	Doctoral student in ET	Master in Art Therapy
Year of Work Experience	16 years	11 years	3 years	5 years
Credentials	ATR (Registered Art Therapist)	ATR equivalent certification from Korea	N/A	ATR equivalent certification from Korea

Study Setting

The study was conducted in multiple sites across Korea. To recruit research participants, the researcher sent out recruitment flyers to over 20 facilities, including children’s hospitals, special schools, children’s developmental centers, welfare centers, private therapy facilities, and associations for disabilities, throughout Korea. However, only six facilities allowed to post the recruitment flyers in their facilities, and mothers in

four out of those six facilities met the research criteria and research schedule. The selected facilities were located in two urban areas (Site 3 and Site 4) and in two rural areas (Site 1 and Site 2). The four areas did not differ significantly in demographic characteristics except for monthly income of mothers, with mothers from urban areas reporting higher monthly incomes compared to mothers from rural areas. For this study, 16 mothers (9 mothers for AG and 7 mothers for CG) were recruited from Welfare Center for Disabilities in Gyeongsang-do Province, eight mothers (4 mothers for AG and 4 mothers for CG) were recruited from Expressive Therapy Center in Jeolla-do Province, 15 mothers (5 mothers for AG and 10 mothers for CG) were recruited from Children's Developmental Center in Gyeonggi-do Province, and five mothers (4 mothers for AG and 1 mother for CG) were recruited from Community-Based Welfare Center in Seoul. Detailed information for each study site is summarized in Table 2.

Table 2

Characteristics of Study Settings

	Study Site 1	Study Site 2	Study Site 3	Study Site 4
Type of Site	Welfare center for disabilities	Private expressive therapy center	Children's development center	Community-based welfare center
Region	Gyeongsang-do	Jeolla-do	Gyeonggi-do	Seoul
Population	People with disabilities of all ages & their families	Children & Adolescents with mental disabilities	Children with mental disabilities & hearing impairment	All people in the community
Services	Self-help group, Parenting training, Physical therapy, Counseling, & Occupational therapy	Music therapy & Art therapy	Speech therapy, Music therapy, & Art therapy	Self-help group, Respite services, & Occupational therapy

Study Period	January - February, 2017	February - March, 2017	March – April, 2017	February – March, 2017
Facilitated Art Therapist	Therapist A (the researcher)	Therapist B	Therapist B	Therapist C

Art Therapy Intervention

This study included six interventions administered over a period of six weeks (a 100-minute intervention each week). Each group art therapy intervention consisted of three phases: (1) a preparation phase, including an introduction of the art materials, a conversation regarding the previous week's session, and a discussion about a theme or topic to be worked on during the session (10 ~15 minutes); (2) a working phase in which the individuals created artworks (50~60 minutes); and (3) a group discussion phase in which the participants provided the feedback to and received the feedback from other group members regarding their art work (30 minutes).

The group art therapy interventions were designed to help mothers: (1) increase their self-awareness of the sources of their parenting stress; (2) encourage them to take an active role in developing coping strategies; (3) enhance their psychological well-being; (4) decrease their parenting stress; and (5) increase their self-awareness of their strengths. To achieve the proposed objectives, art therapy methods and concepts of intervention, such as collage technique, externalization of inner state, problem solving, guided imagery, or relaxation technique, were adopted from group art therapy, cognitive behavioral therapy, and mindfulness-based stress reduction technique. (Benn, Akiva, Arel, & Roeser, 2012; Feinberg et al., 2014; Landgarten, 1993; Rosal, 2016). An outline of six art therapy sessions are as follows:

Session 1: Overview of art therapy and introduction of each member to the group.

Participants were asked to draw themselves as things or animals that represent who they are using various drawing materials (colored pencils, markers, oil pastels, or water paints).

Session 2: Awareness of causes of stress. Participants were asked to create images of their stressor(s) using magazine photo collage technique.

Session 3: Review of stress-coping strategies. Participants were asked to draw how they deal with parenting stress and life stress using drawing materials.

Session 4: Development of stress-coping strategies. Participants were asked to create images of the sources they can use to release stress – OR – their comfortable stress-free place where they could escape from a stressful moment, using drawing materials or 3-dimensional art materials (found objects).

Session 5: Awareness of strengths. The participants were encouraged to think of any strengths they might possess but of which they are not yet aware. The participants were asked to make a strength box that represented their inner and outer strengths.

Session 6: Review of art therapy work and recognition of participant's personal growth. Participants were asked to create symbols of their strengths or images symbolizing their protection from future stressors.

Measurements

Demographic questionnaire for mothers. A demographic questionnaire was created for use in this study to gather information about each mother's age, education, marital status, income, employment status, history of receiving therapy, number of children, disabled child's diagnosis, age of child with disabilities, and the child's gender.

Demographic questionnaire for the art therapists. A demographic questionnaire was created to gather information about each art therapist's age, gender, years of work experience, education, and credentials.

Parental Distress Sub-scale (PD Sub-scale). PD Sub-scale of Parenting Stress Index-Short-Form (PSI-SF; Abidin, 1995) was used to assess parenting stress of mothers of disabled children. PSI-SF (Abidin, 1995) consists of three sub-scales, Parental Distress (PD), Parent-child Dysfunctional Interaction (PCDI), and Difficult Child (DC), measured by 36-items. In this study, only the Parental distress (PD) sub-scale was used to measure parenting stress. The PD sub-scale measures "parents' perception of their own behavior, including perceived competence, marital conflict, views of social support, and life restrictions because of the parenting demands" (Dardas & Ahmad, 2014, p. 562). Sample items of the PD sub-scale include, "I find myself giving up more of my life to meet my child's needs than I ever expected" and "I feel trapped by my responsibilities as a parent." Mothers in this study rated their agreement with each question on 5-point Likert scales ranging from "strongly disagree" (1) to "strongly agree" (5). Raw scores on the PD sub-scale above 33 are considered clinically elevated (Abidin, 1995). In this study, the PD-Sub scale had high internal consistency reliability (Cronbach's α = .80, .84 for pre-test and post-test, respectively).

Draw-a-Person-in-the-Rain (DAPR). The Draw-a-Person-in-the-Rain (DAPR) drawing assessment is a quantified art-based projective drawing test to assess the stress that a person is experiencing, his or her available coping resource, and his or her coping capacity. Participants were asked to draw a person in the rain on a white, blank, 8 ½ x 11inch size paper using a number 2 pencil with an eraser. The DAPR scoring consists

of three sub-scales, the Stress scale, the Resource scale, and the Coping Capacity scale (Lack-SRC; Lack, 1996). The Lack-SRC scoring comprises 35 individual drawing indicators, 16 drawing indicators for the Stress scale and 19 drawing indicators for the Resource scale. The Coping scale is calculated by subtracting the scores of the Stress scale from the Resource scale (Lack, 1996, p. 69). For this study, only the Stress scale was used.

The Stress scale was designed based on the theoretical assumption that the indication of rain or inclement weather is related to a person's level of experienced stress (Lack, 1996, p. 10). For example, 8 out of 16 drawing indicators receive a score of one for the presence of drawing indicators or zero for the absence of the drawing indicators (for example, presence of rain, direction of rain, excess rain, and wind, etc.). The other 8 drawing indicators receive scores for the frequency of certain drawing indicators, such as puddles, clouds, and lightning bolts, among others. The sum of the 16 drawing indicators represents the Stress score (Lack, 1996, p. 87).

Three raters, the researcher (Therapist A), the qualified art therapist (Therapist B), and the expert art therapist (Therapist D), scored the DAPR data. For this study, three raters coded and entered the data individually into the Lack-RSC Scoring Sheet for 44 DAPR assessments (22 pre-DAPR drawings, and 22 post-DAPR drawings of participants from the art therapy intervention group).

Perceived Stress Scale (PSS). The Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) was used to measure the perception of current level of experienced stress. PSS is a 10-item self-report questionnaire that uses a 5-point Likert scale ranging from "Never" (0) to "Very often" (4), with higher scores indicating greater overall

stress. Sample items of the PSS include: “In the last month, how often have you been upset because of something that happened unexpectedly?” and “In the last month, how often have you found that you could not cope with all the things that you have to do?” In this study, Cronbach’s α internal consistency reliability estimates were .84 for the pre-test and .78 for the post-test.

Beck Depression Inventory II (BDI-II) BDI-II (Beck, Steer, & Brown, 1996) was used to measure the severity of depressive symptoms. Beck Depression Inventory (BDI) is one of the most widely used screening measurements to detect severity of depression (Beck et al., 1988). BDI-II is a 21-item self-measured questionnaire that asks participants to rate the severity of their depressive symptoms during the last two weeks. Sample items include: “I am sad all the time”, “I blame myself for everything bad that happens”, and “I find I can’t concentrate on anything”. The responses are measured on a 4-point Likert scale (0 = not at all; 1 = mildly; 2 = moderately; 3 = severely), with a total score ranging from 0 to 63. Beck et al. (1996) classified the severity of depression based on the total score of the scale, specifying no depression (considered normal, 0 -10), mild mood disorder (11 to 16), borderline clinical depression (17-20), moderate depression (21-30), severe depression (31-40), and extreme depression (over 40). In the present study, BDI-II had high internal consistency reliability (Cronbach’s α = .85, .87 for pre-test and post-test, respectively).

The Multidimensional Scale for Social Support (MSPSS). MSPSS (Zimet, Dahlem, Zimet, & Farley, 1988) was used to assess participants’ subjective perception of social support from family members, friends, and significant others. MSPSS is a 12-item self-measured questionnaire that uses a 7-point Likert scale ranging from “Very strongly

disagree" (1) to "Very strongly agree" (7), with higher scores indicating higher social support. Sample items include: "I get emotional help and support from my family", "My friends really try to help me", and "There is a special person with whom I share joys and sorrows". In this study, Cronbach's α internal consistency reliability estimates were .95 for the pre-test and .95 for the post-test, indicating that the MSPSS has very high internal consistency reliability.

Data Analysis

The descriptive statistical analyses and inferential statistical analyses of all collected data were analyzed using the Statistical Package for the Social Sciences (SPSS, version 24 for Windows). An alpha level of .05 was used to determine the statistical significance of the findings.

First, descriptive statistics were performed to describe the characteristics of participants and outcome variables (PSI, PSS, BDI-II, MSPSS, and DAPR drawing test). Then, to determine any differences between the art therapy intervention group and the control group before the art therapy intervention, an independent sample *t*-test was performed to compare both groups in the pre-test scores obtained on four outcome measures (PSI, PSS, BDI-II, and MSPSS).

Second, to determine the effectiveness of group art therapy intervention, independent samples *t*-tests were performed to compare the change in scores (computed by subtracting total scores of the pre-test from the total scores of the post-test) across the four outcome measures (PSI, PSS, BDI-II, and MSPSS) between the art therapy intervention group and the control group. Further, eta-squared was calculated using the formula $\text{Eta Squared} = \frac{t^2}{t^2+(N1+N2-2)}$ (Cohen, 1988) to determine the effect sizes. The

guidelines for interpreting the value of eta squared are as follows, small effect: eta squared = .01, moderate effect: eta squared = .06, and large effect: eta squared = .14 (Cohen, 1988). No Bonferroni adjustments were made for the multiple comparisons since there were relatively small samples.

Lastly, a paired samples *t*-test was performed to examine statistically significant change between pre- and post-test scores on the DAPR-Stress scale for the art therapy intervention group. Prior to the data analysis, inter-rater agreement was performed using ICCs (Intraclass Correlation Coefficients; McGraw & Wong, 1996) to assess consistency among three raters (the researcher, Therapist B, and Therapist D). For this study, an excellent (almost perfect) agreement was found among three raters on the pre-DAPR-Stress scale and the post-DAPR-Stress scale. The average measure of ICCs was .991, with a 95% confidence interval ranging from .983 to .996 (F (21, 42) = 121.872, p = 0 .001), for the pre-DAPR-Stress scale and.989, with a 95% confidence interval from .977 to .995 (F (21, 42) = 101.779, p = 0.001), for the post-DAPR-Stress scale. Because the consistency reliability among three raters was almost perfect, the researcher averaged the three scores (from three raters) to obtain the final score for the DAPR-Stress scale.

CHAPTER 4

Results

This chapter describes the data analyses that were used to investigate the effectiveness of art therapy intervention in improving well-being of mothers of children with disability.

First, the participants' demographic characteristics are presented. Second, the pre-test equivalence in the scores of art therapy group and control group are reported. Third, the analyses used to test the research hypotheses are described. Lastly, the results of paired samples *t*-test, which was conducted to compare pre-test and post-test scores for the DAPR-Stress scale, are presented.

Descriptive Statistics for Demographic Characteristics

As shown in Table 3, the majority of the mothers in both groups had graduated from college, and were stay at home mothers. The largest percentage of mothers in AG and CG never participated in a therapy to improve their well-being (about 86 % and 91%, respectively). The mean age for the disabled children of the mothers in both groups was about 8 years old. Demographic characteristics of the two groups are summarized in Table 3.

Table 3

Descriptive Statistics of Demographic Characteristics-Mother Participants

	Art Therapy Group (*n* = 22)		Control Group (*n* = 22)	
Variables	Mean (*SD*)	N (%)	Mean (*SD*)	N (%)
Mother's age	38.4 (4.11)		39.8 (6.61)	
Mother's education				
High school Grad		3 (13.6 %)		5 (22.7 %)

Community College	2 (9.10 %)	
College Grad.	15 (68.2 %)	16 (72.7 %)
Master's Degree	2 (9.10 %)	1 (4.55 %)
Mother's Employment		
Full-time	1 (4.55 %)	3 (13.6 %)
Part-time	1 (4.55 %)	2 (8.10 %)
On Hold		1 (4.55 %)
Stay-at-home Mom	20 (90.9 %)	16 (73.7 %)
Household Income		
Below 2,000 US$		1 (4.60 %)
2,000~3,999 US$	12 (54.5 %)	10 (45.4 %)
4,000~5,999 US$	4 (18.2 %)	7 (31.8 %)
Above 6,000 US$	5 (22.7 %)	2 (9.10 %)
No answer	1 (4.60 %)	2 (9.10 %)
Previous therapy		
Yes	3 (13.6 %)	2 (9.10 %)
No	19 (86.4 %)	20 (90.9 %)
Number of children	1.59 (0.59)	1.82 (0.59)
Disabled child's age	8.23 (2.43)	7.95 (2.75)
Disabled child's gender		
Male	15 (68.2 %)	14 (63.6 %)
Female	7 (31.8 %)	8 (36.4 %)
Child's diagnosis		
Intellectual Disabilities	11 (50.0 %)	15 (68.2 %)
ADHD	4 (18.2 %)	
ASD	7 (31.8 %)	7 (31.8 %)

Art Therapy Intervention Fidelity

Regarding art therapy intervention fidelity, a total of 24 art therapy session fidelity checklist forms were analyzed (4 art therapy groups x 6 art therapy sessions).

After each art therapy session was completed, the qualified art therapists filled out an art therapy session fidelity form (see Appendix K) that was created by the researcher to check whether the interventions were implemented as stated in the Art Therapy Intervention Manual. Percentages of art therapy intervention fidelity were computed for five intervention elements: (1) Materials (use of designated art materials); (2) Procedures (following directions as stated); (3) Art Task (completion of directives for making artwork); (4) Group Discussion (completion of stated questions for discussion); and (5) Closure. As shown in Table 4, the majority of the sessions (over 90%) were conducted as the Art Therapy Intervention Manual stated. This means participants in the art therapy sessions experienced very similar interventions.

Table 4

Art Therapy Intervention Fidelity: Percentages of Completed Intervention Elements

	Materials		Procedure		Art Task		Group Discussion		Closure	
	n	%	n	%	n	%	n	%	n	%
All 6 sessions	22	92%	21	88%	24	100%	22	92%	23	96%
5 sessions	2	8%	3	12%			1	4%	1	4%
4 sessions							1	4%		

Descriptive Statistics for Dependent Variables

A total of 44 mothers (AG: $n = 22$; CG: $n = 22$) completed both pre-intervention questionnaires and post-intervention questionnaires, including Parental Distress (PD) sub-scale of Parenting Stress Index-SF (PSI-SF), Perceived Stress Scale (PSS), Beck Depression Inventory-II (BDI-II), and Multiple Scale of Perceived Social Support (MSPSS). Participants in the art therapy intervention group (AG) also completed the

Draw-Person-in-the-Rain (DAPR) drawing assessment before and after participating in art therapy sessions. Table 5 shows descriptive statistics for the four dependent variables and internal consistency reliability estimates for AG and CG before and after the art therapy intervention.

Table 5

Descriptive Statistics for the Dependent Variables for Art Therapy Group and Control Group on and Reliability Coefficients at Pre-test and Post-test

	Art therapy Group (AG)		Control Group (CG)		Reliability Coefficients	
	Pre	Post	Pre	Post	Pre	Post
Variables	Mean (*SD*)		Mean (*SD*)		Cronbach's α	
PSI	35.36 (7.04)	31.68 (7.16)	31.05 (7.34)	33.73 (7.31)	.80	.84
PSS	20.82 (5.75)	18.82 (4.25)	17.27 (3.72)	17.91 (4.29)	.84	.78
BDI-II	37.59 (6.65)	34.54 (6.83)	32.09 (5.69)	34.09 (7.18)	.85	.87
MSPSS	62.82 (14.17)	64.86 (13.07)	69.00 (10.80)	66.91(10.56)	.95	.95

Statistics for Pre-Test Equivalence on Research Variables

Scores on pre-test questionnaires (PSI, PSS, BDI-II, and MSPSS) were compared between the AG and the CG to examine whether these dependent variables were equivalent prior to the implementation of the art therapy intervention. As shown in Table 6, the results of an independent samples *t*-test revealed no statistically significant difference between the two groups in parenting stress and perceived social support before the art therapy intervention. These findings indicate that mothers in both groups were equivalent in terms of level of parenting stress and perceived social support. However, difference between AG and CG in perceived stress and depressive symptoms was statistically significant before the art therapy intervention.

Table 6

Dependent Variable Equivalency Between Groups at Pre-Test

	Art Therapy Group (n = 22)		Control Group (n = 22)				
Variables	Mean	SD	Mean	SD	*df*	*t*	*p*
PSI	35.36	7.04	31.05	7.34	42	1.99	0.53
PSS	20.82	5.75	17.27	3.72	42	2.43	0.02*
BDI-II	37.59	6.65	32.09	5.69	42	2.95	0.005*
MSPSS	62.82	14.17	69.00	10.80	42	-1.63	0.11

* $p < 0.05$

The mean of perceived stress was 20.82 (*SD* = 5.75) with a range of 12 - 38 for mothers in the AG and 17.27 (*SD* = 3.72) with a range of 12 – 23 for mothers in the CG. This mean score difference indicates that mothers in the AG had higher perceived stress compared to mothers in the CG before the art therapy intervention. However, the extreme score of perceived stress in the AG (the highest perceived stress score was 38) influenced the mean score difference of perceived stress between the two groups. Likewise, the standard deviation of the perceived stress score in the AG (*SD* = 5.75) also reflected the wide range of variability in the scores. The mothers in the AG obtained a mean of 37.59 (*SD* = 6.65) with a range of 28 - 54 on the measure of depression at pre-test while the mothers in the CG obtained a mean of 32.09 (*SD* = 5.69) with a range of 23 - 44. These mean total scores of BDI-II for the AG and CG indicate that the mothers in the AG experienced more severe depression compared to the mothers in the CG at the pre-test. However, the extreme score of depression in the AG (for example, the highest depression

score was 54) likely accounts for the mean score difference of depression between the AG and the CG.

Group Comparisons

To determine the effectiveness of art therapy intervention, independent samples *t*-tests were performed to compare art therapy group (AG) and the control group (CG) in the change scores of PSI, PSS, BDI-II, and MSPSS. The change scores were computed by subtracting total scores of the pre-test from the total scores of the post-test. The results of independent samples *t*-tests are presented in Table 7.

Table 7

Group Differences in Change Scores between the Art Therapy Group (AG) and the Control Group (CG) and Effect Sizes (eta-squared)

Change Scores	AG (n = 22) Mean (SD)	CG (n = 22) Mean (SD)	*df*	*t*	*p*	eta-squared
PSI	-3.68 (5.17)	2.68 (4.38)	42	-4.40	0.001*	0.32
PSS	-2.00 (4.22)	0.64 (2.66)	42	-2.48	0.017*	0.13
BDI-II	-3.05 (4.57)	2.00 (4.57)	42	-3.66	0.001*	0.24
MSPSS	2.05 (5.45)	-2.09 (8.59)	42	1.91	0.063	0.08

* $p < 0.05$

As shown in Table 7, the difference in the change scores of PSI between the AG and the CG was statistically significant, t (42) = -4.40, p = 0.001. The mothers in the AG showed decreased parenting distress after participating in art therapy intervention group while the mothers in the CG experienced more parenting distress at the post-test

compared to the pre-test. The magnitude of the differences in the means (mean difference = 6.36, 95% *CI*: -9.28 to -3.45) was very large (eta squared = 0.32).

For the measure of PSS, the difference in the change scores between the AG and the CG was statistically significant. Mothers in the AG reported less perceived stress at the post-test while mothers in the CG reported greater perceived stress at the post-test compared to the pre-test. The effect size of the differences in the means (mean difference = 2.66, 95% *CI*: -4.83 to -0.49) was medium to large effect (eta squared = 0.13).

Regarding the level of depression, as measured by BDI-II, the difference in the change scores between the AG and the CG was statistically significant. The mothers in the art therapy group reported greater decrease in the level of depression after the implementation of art therapy intervention compared to the mothers in the control group. The magnitude of the differences in the means (mean difference = 5.05, 95% *CI*: -7.83 to -2.27) was large (eta squared = 0.24).

The difference in the change scores for MSPSS between the mothers in AG and the mothers in the CG was non-significant, t (42) = 1.91, p = 0.063. The effect size of the difference in the means (mean difference = 4.14, 95% *CI*: -0.24 to 8.51) was medium (eta squared = 0.08). This result indicates that the mothers in the AG reported greater perceived social support compared to the mothers in the CG. However, the score difference in perceived social support between groups was not significantly different.

Comparison of the Pre- and Post-DAPR Drawing Assessment

To examine the effectiveness of the art therapy intervention in decreasing parenting stress, a paired samples *t*-test was conducted to compare the pre- and post-test scores of stress indicators measured by the DAPR-Stress scale. The decrease in the

DAPR-Stress scores from the pre-test (M = 5.88, SD = 2,03) to the post-test (M = 3.89. SD = 1.66) was statistically significant, t (21) = -3.56, p = 0.002. The mean decrease in the DAPR-Stress scores was -1.99, with a 95% confidence interval ranging from -3.14 to -0.83. The eta squared statistic (0.38) indicated a very large effect size.

This result indicated that mothers in the art therapy group depicted fewer stress indicators in their post-DAPR assessment drawings compared to their pre-DAPR assessment drawings. More specifically, all mothers (n = 22) depicted excessive rain in their pre-DAPR drawings but 11 mothers (50%) depicted less rain in their post-DAPR drawing. Five mothers depicted puddles in their pre-DAPR drawing; however, no mother drew puddles in their post-DAPR drawing. Four mothers drew several clouds in their pre-DAPR drawings, but these four mothers did not draw clouds in their post-DAPR drawings.

CHAPTER 5

Discussion

This study quantitatively examined the effect of group art therapy intervention on parenting stress, perceived stress, depression, and perceived social support among Korean mothers of children with disabilities using psychometric questionnaires and a quantifiable art-based projective drawing test. This chapter comprises two sections that discuss (1) the research results regarding two research questions; and (2) the limitation of the study as well as suggestions for the future studies.

Research Questions

This study addressed the following two questions:

1. Is there a statistically significant difference in parenting stress, perceived stress, depressive symptoms, and perceived social support between the art therapy intervention group and the control group?
2. Is there a statistically significant difference in stress indicators of the DAPR drawing assessment (the DAPR-Stress scale) in the art therapy intervention group?

Parenting stress, Perceived stress, and Depression. The results of the study indicated that mothers in the art therapy intervention group experienced significantly decreased levels of reported parenting stress, perceived stress, and depression after participating in the art therapy intervention group compared to the mothers in the control group.

More specifically, while mothers in the AG reported decreased levels of parenting distress after the art therapy intervention, mothers in the CG actually reported higher

levels of parenting distress at post-test. Regarding perceived stress, the mothers in the AG reported less perceived stress at the post-test while the mothers in the CG showed increased perceived stress at the post-test. Regarding the level of depression, mothers in the AG reported greater decrease in the level of depression after the implementation of art therapy intervention while the mothers in the CG experienced more depression at the post-test. The decreased scores on the PSI, PSS, and BDI-II by the mothers in the art therapy group suggest that the group art therapy intervention may have helped these mothers reduced negative consequences of raising children with disabilities.

These results are consistent with the findings from a study by Shechtman and Gilat (2005), which found that group counseling intervention helped the mothers of disabled children decrease their parenting stress. This study focused on the internal state of mothers with disabled children rather than parenting training. It further focused on helping mothers interact with other mothers in the intervention group in supportive ways. The group art therapy intervention of the current study provided mothers of children with disabilities the opportunity to express their feelings regarding parenting stress through visual images and encouraged the mothers to share their experiences and images with other mothers of disabled children in the group in supportive and non-judgmental manners. Riley (2001) theorized that creating art works in group art therapy can provide group members with "new awareness of the art maker" and can help the creator relate to those with whom the art work is shared in the group (p. 5). Bell and Robbins (2007), and De Petrillo and Winner (2005) also found that participation in art product creation and engagement in art making process helped participants decrease negative mood, such as anxiety and depression, and provided positive and pleasurable experiences.

According to Ainbinder et al. (1998) and Solomon, Pistrang, and Barker (2001), parents of disabled children can receive benefits from group-based interventions because those parents can share their similar experiences of parenting disabled children and can learn practical coping strategies from other parents. Therefore, sharing their inner state of mind regarding parenting stress and the psychological and physical hardships of raising disabled children through visual images in the group art therapy sessions helped the mothers experience less parenting stress and depressive symptoms.

Conversations during the art therapy intervention sessions and voluntary feedback on the art therapy sessions at the end of each session also revealed that the group art therapy helped the participating mothers experience less depressive symptoms and parenting stress. The participants in the art therapy intervention group stated, “I found that talking about issues of raising disabled children in Korea with other mothers in the group gave me a sense of belonging. I feel like I am not all alone.” or “I didn’t know that I can speak what’s in my mind by drawing. It is really great that I can express my anger, frustration, or disappointment without saying any word.” Many mothers expressed similar ideas after making art about stressful situations using magazine photo collage, stating, “I thought that I feel stressed and overwhelmed because my son is autistic, but I realized that my stress and frustration came from my husband, my in-laws, as well as unfriendly people. I noticed that when perusing magazine photographs that could depict my ‘stressful situation,’ I mostly selected images that represented un-supportive husband and his parents and other people’s negative attitude toward my son.” Another participant mentioned, “I like coming to the art therapy sessions because I could completely pay attention to myself, and I could draw or make things just for myself using these

wonderful art materials." This mother did not want to bring her artwork home because she did not want to see her child destroying her artwork. This mother stated, "I want to take a picture of my artwork so I can take look at whenever I need stress-free, in a peaceful environment"

These statements indicated that group art therapy intervention allowed participating mothers to share their thoughts and feelings regarding their parenting stress and stress in general through visual images. They could use those images to support each other throughout the sessions. Furthermore, the mothers gained a deeper insight about their situations through artistic expression. Working with various art materials, some of which were unfamiliar to them, gave these mothers a joyful time and sense of accomplishment when they completed their art works.

Perceived social support. It was expected that art therapy intervention would increase the perception of social support among mothers in the AG, compared to mothers in the CG, but this hypothesis was not supported, as the two groups did not differ significantly in perceived social support. This result could be explained by the higher baseline scores of both groups. The mean pre-test MSPSS scores of the mothers in the AG (M = 62.82) and the CG (M = 69.00) indicated high social support. Because mothers in both groups perceived their social support as high before the implementation of art therapy intervention, there was no room for additional increase in the scores of perceived social support. Although the groups did not statistically differ in perceived social support, an increase in the change score (2.04) was noted following the group art therapy intervention for mothers in the AG while a decrease in the change score (-2.09) of perceived social support was observed for mothers in the CG. This indicates that the art

therapy intervention might help mothers perceive their social support in a more positive way.

The DAPR-Stress scale from the Draw-a-Person-in-the Rain (the DAPR) drawing assessment. It was hypothesized that the scores of DAPR stress indicators would decrease significantly from the pre- to the post-assessment after the art therapy intervention. The findings supported the hypothesis that mothers in the AG would draw significantly fewer stress indicators (M = 5.88) in their post-DAPR assessment than in their pre-DAPR assessment (M = 3.89), with a very large effect size. This finding suggests that the art therapy intervention helped the mothers lower their stress and through art-based projective drawing, it could detect the changes in the level of stress by drawing indicators of stress, such as no rain, rain presence, excess rain, rain style, rain directed, rain touching, getting wet, wind, number of puddles, standing in puddle, multiple rain styles, multiple precipitation, lighting bolt, lightning hit, number of clouds, or darkened cloud.

Figure 1 and Figure 2 show examples of the DAPR drawn by the 39-year-old mother of a male child with ADHD (Mother A). In her pre-DAPR drawing (Figure 1), she depicted stress indicators, such as excess rain, different rain styles, rain touching the umbrella, and five puddles, and her stress indicator score was 9. However, after participating in the art therapy intervention group, her post-DAPR drawing depicted less rain, no rain touching the umbrella, and no puddle. Moreover, her stress indicator score was 4. This mother scored 44 on the PSI on the pre-test, indicating clinically elevated parenting stress, while on the post-test, she scored 26 on the PSI. The pre-DAPR drawing of Mother A (Figure 1) revealed that this mother experienced a lot of heavy external and

environmental stressors (depicted by excessive rain, rain touching the umbrella, and five puddles). However, the figure in the pre-DAPR drawing of Mother A included rain protection gears, such as rain boots and two umbrellas. Mother A mentioned that she drew two umbrellas, one for herself and the other for her disabled son, and these two umbrellas in the drawing represented that Mother A was over-burdened by caring not only for herself, but also for her disabled son. After Mother A participated in six art therapy interventions, her post-DAPR drawing (Figure 2) changed. Her post-DAPR drawing indicated that Mother A perceived her external stressors as less stressful (depicted by less rain, no rain touching the umbrella, and no puddles) compared to her pre-DAPR drawing. In addition, the size of the figure and rain boots in the-post DAPR drawing became bigger compared to those in the pre-DAPR drawing. These changes in size in the post-DAPR drawing suggest that Mother A has good resources to cope with her environmental stress, and these coping resources helped her perceive the stress as less stressful. This projective drawing assessment, the DAPR, not only revealed stress score changes, but also provided detailed information on the ways in which Mother A perceived stress before and after art therapy intervention and on the changes in Mother A's coping resources.

Another DAPR-drawing example (see Figure 3 and Figure 4) showed a decreasing number of stress indicators following the participation in the art therapy intervention group. Figure 3 (pre-drawing) and Figure 4 (post-drawing) were drawn by the 30-year-old mother of a 6-year-old male child with intellectual disability (Mother B). Her pre-DAPR drawing depicted stress indicators, such as excessive rain, rain touching umbrella, the human figure, and three clouds, and her stress indicator score was 9. After

participating in art therapy, this mother drew less rain, no rain touching, and no clouds in her post-DAPR drawing. Her stress indicator score was 4. Mother B scored 46 on the PSI on the pre-test and 40 on the post-test.

The stress score change on the DAPR-Stress scale was highly consistent with the score change on the self-report measurement, PSI. These results are in line with the findings reported by Kwon, Kim, and Song (2016) and Kim, Lee, and Woo (2013). Kwon et al. (2016) found that Korean nurses who had higher level of stress response, as measured by the Stress Response Inventory, drew excess rain and rain touching the human figure in the DAPR drawing more frequently compared to nurses with lower level of stress response. Similarly, Kim et al. (2013) found that Korean nurses who experienced a higher level of job stress frequently depicted stress indicators in their DAPR drawing, such as rain touching, lightning bolts, lighting strikes, puddles, and clouds. In conclusion, changes in the scores of stress indicators from the DAPR drawing assessment could indicate changes in the level of stress after participating in art therapy intervention.

Figure 1. Pre-DAPR drawing by Mother A

Figure 2. Post-DAPR drawing by Mother A

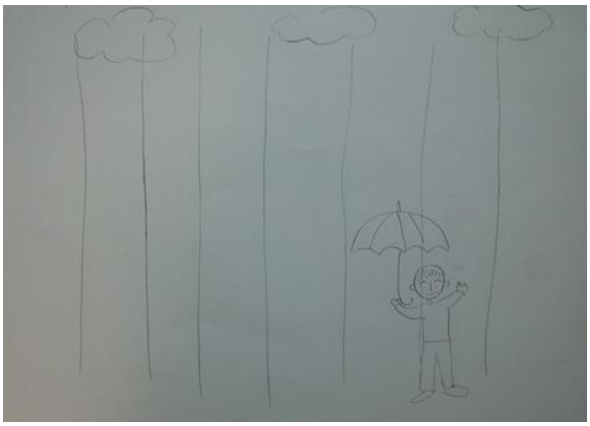


Figure 3. Pre-DAPR drawing by Mother B

Figure 4. Post-DAPR drawing by Mother B

Limitations and Suggestions for Future Research

The results of this study supported the effectiveness of group art therapy intervention for Korean mothers of children with disabilities in enhancing mothers' well-being, such as: decreasing parenting stress, decreasing perceived stress, and lessening depression. Although the findings of this study indicated that group art therapy intervention may have helped Korean mothers of children with disabilities enhance their psychological well-being, several limitations of this study should be acknowledged in interpreting the findings.

The relative homogeneity of the research participants is the first limitation of this study. The participants were not representative of all mothers of children with disabilities in Korea. I tried to recruit participants from various demographic backgrounds, in terms of: marital status, educational level, economic status, and employment status. However, because of recruitment challenges, the participants of this study were all married and lived with their husbands (except for one mother, who was divorced). In addition, about 80% of the participants held bachelor's degrees and above. Also, about 90% of the

mothers in the intervention group and about 80% of the mothers in the control group reported their employment status as “stay-at-home mother”. Future studies in Korea should recruit caregivers from other backgrounds as well, for example, mothers from single parent families, mothers from mixed families, mothers who work full-time, or caregivers from same sex marriages, to generalize the results of the effectiveness of art therapy intervention.

The second limitation of this study is that, as mentioned earlier, non-random, self-selection to the experimental and control group design of the study may have biased the research findings. For future studies, a random assignment of participants into the intervention group and the control group will strengthen the effectiveness of the art therapy intervention for mothers of children with disabilities.

Another limitation of this study lies in the fact that the findings of the study heavily relied on mothers’ self-reporting, and it is possible that reporting biases could influence the results of the study. Even though this study added another type of measurement to assess levels of stress, which was an art-based, projective drawing assessment, or namely, the DAPR drawing assessment, additional types of assessments are needed. Therefore, in order to validate the findings, future studies should incorporate additional data from other resources, such as researchers’ direct observations of mothers’ behavioral changes or measures of the biomarkers of stress and depression.

The last limitation of the study is that the dual roles of the researcher could have affected the results of the study. Because of the recruitment challenge of finding qualified art therapists to facilitate art therapy intervention groups in certain regions (in this study, Gyeongsang-do Province), the researcher facilitated one of the four intervention

groups. In order to avoid dual role influence on participants' answers for the questionnaires, the researcher asked a social worker in the facility to administer the pre- and post-questionnaires. However, mothers in the art therapy group were not blind to the fact that they were in the art therapy intervention group for this study. Therefore, they might have provided desirable answers on the post-test to please the art therapist (the researcher) or express their appreciation for receiving the six-week intervention.

In conclusion, despite its limitations, the quantitative results of the current study appear to indicate effectiveness of group art therapy intervention in enhancing the well-being of mothers who raise children with disabilities. Previous research on art therapy has provided some evidence of possible treatment intervention for lowing depression of mothers, improving the mother-disabled child relationship, or decreasing the stress of mothers of children with disabilities (see Ponteri, 2001; Stone, 1982; and Lee & Peng, 2017), but not all outcomes of art therapy interventions for these populations were adequately measured. In particular, there is a lack of quantitative research investigating the effectiveness of group art therapy intervention for this population. Therefore, the current study, using a quantitative research design, supports an alternative method for filling in the gaps and providing better treatment interventions for mothers of children with disabilities. And this study contributes to add volume of art therapy intervention research for caregivers of children with disabilities. In addition, this study provides valuable information regarding the projective drawing assessment (the DAPR) to measure mothers' stress, and these results might provide an alternative way of measuring parenting stress in art therapy practice. Findings of this study can help policy makers (or mental health professionals) consider including mothers' mental health when treating

disabled children, because the well-being of the mother both directly and indirectly influences the well-being and health of their disabled children. Additionally, this study contributes to the field of art therapy by deepening our understanding of art therapy intervention for mothers of children with disabilities, and it may inspire future researchers wishing to develop better art therapy interventions for these populations.

APPENDIX A

RECRUITMENT FLYER (ENGLISH)

RECRUITMENT FLYER

Dear Mothers,

My name is Ji Hyun Lee, and I am a PhD student in Expressive Therapies at Lesley University. I am currently conducting doctoral research, and I am seeking participants. The focus of my research is to find out the effectiveness of group art therapy for mothers of children with disabilities in decreasing parenting stress and depressive symptoms and in increasing the level of perceived social support.

The criteria for choosing participants is as follows:

- Participants must be 20 years of age or older
- Participants must be Korean mothers who are biological mothers or step-mothers
- Participants must be primary caregivers for children with disabilities
- Participants must reside in the same household with at least one child with disabilities under the age of 13
- Participants must not currently be participating in another form of psycho-therapy treatment
- Participants must not currently be experiencing severe mental health issues such as depression, anxiety, or PTSD which require a higher degree of professional care
- Participants must be able to speak, read, and write the Korean language to complete questionnaires
- Participants must be able to provide their own transportation to participate in the six art therapy sessions

If you satisfy the above criteria and you are interested in participating in the art therapy group, you will be asked to:

- Fill out a survey on your personal information and your disabled child's information
- Fill out four questionnaires before and after participation in six art therapy sessions.
- Participate in six group art therapy sessions which last 100 minutes each.

If you satisfy the above criteria but cannot participate in the six consecutive art therapy sessions, you are invited to fill out four questionnaires, two times in a six week interval. After completing the questionnaires, gift cards in the amount of $10.00 will be given to each participant.

If you are interested in participating in the study, please feel free to contact me at arttherapyformom@naver.com or jlee17@lesley.edu. Also, you are always welcome to contact me with further questions or for more information.

APPENDIX B

RECRUITMENT FLYER (KOREAN)

연구 참여자를 모집합니다

안녕하세요?
저는 현재 미국의 레슬리 대학(Lesley University)에서 표현예술치료-미술치료 박사과정에 있는 이지현 (ATR: 미국 공인 미술치료사, MFT: 가족치료사)이라고 합니다. 아동을 양육하면서 경험하는 어머니들의 양육 스트레스를 경감시키고 어머니들의 정신건강을 도모할 수 있는 집단 미술치료 프로그램 연구를 진행하려고 합니다.
아래의 내용을 확인하시고 관심 있는 분들의 많은 지원 부탁 드립니다.

1. 내용: 연구에 참여 하시는 어머니는 양육 스트레스를 주제로 하는 6회기 집단 미술치료 참여와 양육 스트레스관련 설문지를 작성하시게 됩니다.
2. 대상:
   - 현재 장애 아동을 (4세~13세, 자폐, ADHD, 인지장애 등) 양육하는 어머니
   - 현재 심각한 정신질환으로 치료 중이거나 약을 먹고 있지 않는 어머니
   - 현재 양육 스트레스를 위한 심리치료를 받고 있지 않는 어머니
   - 설문지 작성과 그룹 참여를 위해 한국어가 원활한 어머니
   - 6회기 그룹 미술치료에 모두 참여 가능한 어머니 (주1회 1시간 40분)
3. 인원: 4 ~ 10명
4. 일시: 2017년 2월 말 (혹은 3월 초) 진행 예정
6. 장소: 기관 내 치료실 혹은 상담실
7. 미술치료 진행 치료사: 미술치료 석사 졸업 혹은 박사 과정에 있는, 미술치료 임상경력이 있는 미술치료사가 6회기의 미술치료를 진행함
8. 미술치료 참여가 불가능하지만 양육관련 설문지를 두 번 작성해 주실 수 있는 어머니들께서 연락을 주시면 설문지를 우편으로 보내 드립니다. (설문참여 감사의 뜻으로 커피카드나 문화 상품권을 설문지와 함께 보내 드립니다)
9. 신청 및 문의: 이지현
   arttherapyformom@naver.com 혹은 jlee17@lesley.edu 로
   이메일/ 전화를 주시면 연구참여에 대한 자세한 정보를 드리겠습니다.
   전화번호: ***-****-****

APPENDIX C

INFORMED CONSENT FORM (ENGLISH)

(Mother-Participants for Art Therapy Group)

INFORMED CONSENT FORM

(Mother-Participants for Art Therapy Group)

Research Informed Consent

You are invited to participate in the research project titled "Group Art Therapy and Self-care for Mothers of Children with Disabilities". The intent of this research study is to find out the effectiveness of art therapy intervention for mothers of disabled children; to decrease their parenting stress and depression, and to increase the level of perceived social support.

Your participation will entail:

- You will be given a survey to fill out on your personal information and your disabled child's information
- You will be given questionnaires to fill out before and after participation of six art therapy sessions.
- You will participate in six group art therapy sessions which last 100 minutes.

In addition

- You are free to choose not to participate in the research and to discontinue your participation in the research at any time.
- Identifying details will be kept confidential by the researcher. Data collected will be coded with a pseudonym, the participant's identity will never be revealed by the researcher, and only the researcher will have access to the data collected.
- Any and all of your questions will be answered at any time and you are free to consult with anyone (i.e., friend, family) about your decision to participate in the research and/or to discontinue your participation.
- Participation in this research poses minimal risk to the participants. The probability and magnitude of harm or discomfort anticipated in the research are no greater in and of themselves than those ordinarily encountered in daily life.
- If any problem in connection to the research arises, you can contact the researcher Ji Hyun Lee at _____ and by email at jlee17@lesley.edu or Lesley University sponsoring faculty, Robyn Flam Cruz, Ph.D., BC-DMT at and by email at rcruz@lesley.edu.
- The researcher may present the outcomes of this study for academic purposes (i.e., articles, teaching, conference presentations, supervision etc.)

Confidentiality, Privacy and Anonymity:

You have the right to remain anonymous. If you elect to remain anonymous, we will keep your records private and confidential ***to the extent allowed by law****. We will use pseudonym identifiers rather than your name on study records. Your name and other facts that might identify you will not appear when we present this study or publish its results.*

If for some reason you do not wish to remain anonymous, you may specifically authorize the use of material that would identify you as a subject in the experiment. You can contact my advisor Dr. Robyn Cruz at rcruz@lesley.edu with any additional questions.
We will give you a copy of this consent form to keep.

My agreement to participate has been given of my own free will and that I understand all of the stated above. In addition, I will receive a copy of this consent form.

_____	_____	_____	_____
Participant's signature	Date	Researcher's signature	Date

*There is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee at Lesley University, 29 Everett Street, Cambridge Massachusetts, 02138, Co-Chairs Robyn Cruz (*rcruz@lesley.edu) or Terry Keeney (tkeeney@lesley.edu).

APPENDIX D

INFORMED CONSENT FORM (KOREAN)

(Mother-Participants for Art Therapy Group)

미술치료 (연구) 참여 동의서

본 연구, 집단 미술치료는 (적응에 어려움이 있는) 아동을 키우고 계신 어머니들의 양육스트레스, 심리적 건강과 미술치료의 효용성을 알아보기 위한 것입니다.

이연구를 위한 미술치료에 참여하시면,

1) 참여 어머니와 자녀의 기본 인적사항에 대한 질문지를 작성하시게 됩니다.
2) 참여 어머니의 양육스트레스와 심리 건강에 대한 설문지를 미술치료 시작하기 전에 한번, 전체 6 회기의 미술치료가 끝난 후 한번 작성하시게 됩니다.
3) 참여 어머니는 100 분간 진행되는 6 회기의 그룹 미술치료에 참여하게 됩니다.

이 연구를 위한 미술치료 참여하는 어머니는 아래의 항목에 대한 설명을 들었습니다.

1) 연구에 참여하기 위해 미술치료에 대한 사전 지식은 필요하지 않습니다.
2) 귀하는 자유로운 의사에 따라서 언제나 미술치료 참여 의사를 철회 할 수 있습니다.
3) 귀하의 개인정보는 어떠한 경우에도 보호되며, 연구 결과 물의 발표나 출판의 경우 귀하의 모든 정보는 가명이나 기호로 표기될 것입니다.
4) 귀하는 연구자에게 어떠한 질문도 할 수 있으며, 타인과 치료참여에 대한 의견을 나누실 수 있습니다.
5) 만약, 설문 참여 중 어떠한 문제라도 발생이 된다면, 연구자, 이지현 (_____, arttherapyformom@naver.com) 이나 Lesley University 의 책임 교수인 Robyn Flam Cruz (_____ , rcruz@lesley.edu)로 연락을 주시면 됩니다.
6) 연구자는 연구의 결과를 학문적인 목적으로 사용하게 될 것입니다. (예: 논문, 강의, 학회)

본인은 위의 내용을 모두 읽고 이해하였습니다. 이에 본인은 본 연구에 참여하는 것을 동의합니다.

_____ _____ _____ _____

참여자 이름 서명 날짜 연구자 이름 서명 날짜

APPENDIX E

INFORMED CONSENT FORM (ENGLISH)

(Mother-Participants in the Control Group)

INFORMED CONSENT FORM

(Mother-Participants in the Control Group)

You are invited to participate in the research project titled "Group Art Therapy and Well-Beings of Mothers with Disabled Children" as a participant in the control group. The intent of this research study is to find out the effectiveness of art therapy intervention for mothers of disabled children; 1) to decrease their parenting stress, 2) to increase their psychological well-being, and; 3) to increase physical well-being".

Your participation will entail:

- Filling out a survey on yours and your disabled child's personal information and a questionnaire the first week of the study.
- Filling out the same questionnaire at the end of the six week study.
- Survey and questionnaires will be sent to you by the researcher through the mail.
- You will return said survey and questionnaires by self-addressed stamped envelopes provided by the researcher.

In addition

- You are free to choose not to participate in the research and to discontinue your participation in the research at any time.
- Identifying details will be kept confidential by the researcher. Data collected will be coded with a pseudonym, the participant's identity will never be revealed by the researcher, and only the researcher will have access to the data collected.
- Any and all of your questions will be answered at any time and you are free to consult with anyone (i.e., friend, family) about your decision to participate in the research and/or to discontinue your participation.
- Participation in this research poses minimal risk to the participants. The probability and magnitude of harm or discomfort anticipated in the research are no greater in and of themselves than those ordinarily encountered in daily life.
- If any problem in connection to the research arises, you can contact the researcher Ji Hyun Lee at _____ and by email at jlee17@lesley.edu or Lesley University sponsoring faculty, Robyn Flam Cruz, Ph.D., BC-DMT at and by email at rcruz@lesley.edu.
- The researcher may present the outcomes of this study for academic purposes (i.e., articles, teaching, conference presentations, supervision etc.)

My agreement to participate has been given of my own free will and that I understand all of the stated above. In addition, I will receive a copy of this consent form.

_____	_____	_____	_____
Participant's signature	Date	Researcher's signature	Date

APPENDIX F

INFORMED CONSENT FORM (KOREAN)

(Mother-Participants in the Control Group)

설문(연구) 참여 동의서

본 연구는 (장애) 아동을 키우고 계신 어머니들의 양육스트레스를 줄이고 정신 건강을 도모하는 미술치료의 효용성을 알아보기 위한 것입니다.

이연구를 위한 설문에 참여하시면,

- 참여 어머니와 자녀의 기본 인적사항에 대한 질문지를 작성하시게 됩니다.
- 참여 어머니의 양육스트레스와 심리적 건강에 대한 설문지를 작성하시게 됩니다.
- 첫 설문지를 작성한 후 6 주 후에 다시 한번 같은 설문지를 작성하시게 됩니다.

이 연구를 위한 설문 참여자는 아래의 항목에 대한 설명을 들었습니다.

1) 귀하는 자유로운 의사에 따라 언제나 설문참여 의사를 철회하실 수 있습니다.
2) 귀하의 개인정보는 어떠한 경우에도 보호되며, 연구 결과물의 발표나 출판의 경우 귀하의 모든 정보는 가명이나 기호로 표기될 것입니다.
3) 귀하는 연구자에게 어떠한 질문도 할 수 있으며, 타인과 설문참여에 대한 의견을 나누실 수 있습니다.
4) 만약, 설문 참여 중 어떠한 문제라도 발생이 된다면, 연구자, 이지현 (TEL: , arttherapyformom@naver.com) 이나 Lesley University 의 책임 교수인 Robyn Flam Cruz (TEL: , rcruz@lesley.edu)로 연락을 주시면 됩니다.
5) 연구자는 연구의 결과를 학문적인 목적으로 사용하게 될 것입니다. (예를 들면, 논문, 강의, 학회발표 등)

본인은 위의 내용을 모두 읽고 이해하였습니다. 이에 본인은 본 연구에 참여하는 것을 동의합니다.

참여자 이름	서명	날짜	연구자 이름	서명	날짜

APPENDIX G

DEMOGRAPHIC QUSTIONNAIRE (ENGLISH)

DEMOGRAPHIC QUSTIONNAIRE

1. Age of participant:

2. What is your marital status?

① Married

② Divorced

③ Separated

④ Remarried

⑤ Other (Please specify):

3. What is the highest level of education you have completed?

4. What is your employment status?

① Full-time employment

② Part-time employment

③ Unemployed (Currently out of work)

④ Stay-at-home

5. What is the approximate annual household income of your family?

① Below KW 25,000,000

② KW 25,000,001 - KW 40,000,000

③ KW 40,000,001 – KW 60,000,000

④ Above KW 60,000,000

6. Do you have previous therapy experience other than art therapy? If you had a previous
therapy experience for yourself, please specify.

7. How many children do you have including your disabled child?

8. What is your disabled child's disability? (For example, ASD, or ADHD)

9. What is your disabled child's gender?

10. How old is your disabled child?

APPENDIX H

DEMOGRAPHIC QUSTIONNAIRE (KOREAN)

인적사항

1. 설문 참여자의 나이는 어떻게 되나요? ( )세

2. 현재 당신의 결혼 여부는 어떻게 되나요? (해당번호에 표시하면 됩니다)

① 결혼

② 이혼

③ 별거

④ 재혼

⑤ 기타 (상세하게 적어주세요):

3. 당신의 교육정도는 어떻게 되나요? (예: 고졸, 대졸, 대학원 졸)

(**)**

4. 당신의 고용상태는 어떻게 되나요?

① 풀타임

② 파트타임

③ 무고용 (현재 휴직 중)

④ 주부

5. 당신 가정의 월수입은 어떻게 되나요?

① 250 만원 미만

② 250 만원 이상 - 400 만원 미만

③ 400 만원 이상 - 6000 만원 미만

④ 600 만원 이상

⑤ 무응답

6. 당신은 이전에 자신을 위한 어떠한 치료나 상담에 참여한 적이 있습니까? (YES / NO)

만약 치료나 상담을 받은 경험이 있다면 어떠한 종류의 치료나 상담이었나요?

(**)**

7. 자녀가 몇명인가요? ( ) 명

8. 당신의 자녀 중 진단을 받은 아동이 있다면 아동의 진단명은 무엇인가요? ( )

9. 당신의 자녀의 성별은 어떻게 되나요? (남자 / 여자)

10. 당신의 자녀는 몇 살인가요? ( ) 세

APPENDIX I

INSTRUMENTS (ENGLISH)

1. Perceived Stress Scale
2. Beck Depression Inventory-Second Edition
3. Multidimentional Scale of Perceived Social Support

Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)

The Question in the scale ask you about your feelings and thought during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

0 = ***Never***
1 = ***Almost Never***
2 = ***Sometimes***
3 = ***Fairly Often***
4 = ***Very Often***

		0	1	2	3	4
1	In the last month, how often have you been upset because of something that happened unexpectedly?					
2	In the last month, how often have you felt that you were unable to control the important things in your life?					
3	In the last month, how often have you felt nervous and "stressed"?					
4	In the last month, how often have you felt confident about your ability to handle your personal problems?					
5	In the last month, how often have you felt that things were going your way?					
6	In the last month, how often have you found that you could not cope with all the things that you had to do?					
7	In the last month, how often have you been able to control irritations in your life?					
8	In the last month, how often have you felt that you were on top of things?					
9	In the last month, how often have you been angered because of things that were outside of your control?					
10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Beck Depression Inventory-Second Edition

(BDI-II; Beck, Steer, & Brown, 1996)

Instructions: Please rate the severity of your depressive symptoms during the past 2 weeks.

0 = ***Not at all***

1 = ***Mildly***

2 = ***Moderately***

3 = ***Severely***

		0	1	2	3
1	I am sadness all the time.				
2	I feel my future is hopeless and will only get worse.				
3	As I look back, I see a lot of failures.				
4	I can't get any pleasure from the things I used to enjoy.				
5	I feel quite guilty most of time.				
6	I feel I am being punished.				
7	I am disappointed in myself.				
8	I blame myself for everything bad that happens.				
9	I would like to kill myself.				
10	I feel like crying, but I can't.				
11	I am so restless or agitated that it's hard to stay still				
12	It's hard to get interested in anything				
13	I have much greater difficulty in making decisions than I used to.				
14	I don't consider myself as worthwhile as useful as I used to				
15	I don't have enough energy to do very much.				
16	I sleep most of day.				
17	I am irritable all the time.				
18	My appetite is much greater than usual.				
19	I find I can't concentrate on anything.				
20	I am too tired or fatigued to do a lot of things I used to do.				
21	I have lost interest in sex completely.				

Multidimentional Scale of Perceived Social Support
(Zimet, Dahlem, Zimet & Farley, 1988)

Instruction: We are interested in how you feel about the following statement. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you ***Very Strongly Disagree***
Circle the "2" if you ***Strongly Disagree***
Circle the "3" if you ***Mildly Disagree***
Circle the "4" if you ***Neutral***
Circle the "5" if you ***Mildly Agree***
Circle the "6" if you ***Strongly Agree***
Circle the "7" if you ***Very Strongly Agree***

		1	2	3	4	5	6	7
1	There is a special person who is around when I am in need.							
2	There is a special person with whom I can share my joys and sorrows.							
3	My family really tries to help me.							
4	I get the emotional help and support I need from my family							
5	I have a special person who is a real source of comfort to me.							
6	My friends really try to help me.							
7	I can count on my friends when things go wrong.							
8	I can talk about my problems with my family.							
9	I have friends with whom I can share my joys and sorrows.							
10	There is a special person in my life who cares about my feelings.							
11	My family is willing to help me make decisions.							
12	I can talk about my problems with my friends.							

APPENDIX J

INSTRUMENTS (KOREAN)

1. Perceived Stress Scale
2. Beck Depression Inventory-Second Edition
3. Multidimentional Scale of Perceived Social Support

설문 1. Perceived Stress Scale (PSS)

지난 한달 동안, 아래의 질문에 해당하는 감정이나 생각들을 **얼마나 자주** 경험했는지 표시해 주기 바랍니다.

		전혀 없었다	거의 없었다	가끔 있었다	자주 있었다	매우 자주 있었다
1	당신은 얼마나 자주 예상치 못한 일로 화가 났나요?	0	1	2	3	4
2	당신은 얼마나 자주 생활하면서 중요한 것들을 통제할 수 없을 것같은 느낌이 들었나요?	0	1	2	3	4
3	신경이 예민해지고 "스트레스"를 받은 적이 있나요?	0	1	2	3	4
4	얼마나 자주 개인적인 문제를 해결할 수 있다는 자신감이 느껴졌나요?	0	1	2	3	4
5	당신은 얼마나 자주 어떤 일들이 당신이 원하는 대로 가고있다고 느꼈나요?	0	1	2	3	4
6	얼마나 자주, 당신은 당신이 해야만 하는 일들을 감당할 수 없다고 느꼈나요?	0	1	2	3	4
7	당신은 얼마나 자주 생활에 있어 화나는 일들을 조절할 수 있었나요?	0	1	2	3	4
8	당신은 얼마나 자주 모든 일들이 잘 풀린다고 느꼈나요?	0	1	2	3	4
9	당신은 얼마나 자주 당신이 통제할 수 없는 것으로 인해 화가 났나요?	0	1	2	3	4
10	얼마나 자주, 힘든 일들이 너무 많이 쌓여 도저히 감당할 수 없다고 느꼈나요?	0	1	2	3	4

설문 2. BDI-II

아래의 문항을 읽어 보시고 지난 2 주동안의 자신을 가장 적합하게 설명하고 있는 문항에 O 표를 하세요.

1-(1) 나는 전혀 슬프지 않다 ( ) (2) 나는 약간 슬프다 ( ) (3) 나는 자주 슬프다 ( ) (4) 나는 매우 슬프다 ( )
2-(1) 나는 나의 앞날에 대해 전혀 낙담하지 않는다 ( ) (2) 나는 나의 앞날에 대해 약간 낙담하고 있다 ( ) (3) 나는 나의 앞날에 대해 많이 낙담하고 있다 ( ) (4) 나는 나의 앞날에 대해 매우 절망적이고 좋아지지 않을 것이라고 생각한다 ( )
3-(1) 과거를 되돌아 보면, 나는 실패자라고 생각하지 않는다 ( ) (2) 과거를 되돌아 보면, 나는 약간 실패자인 것 같다 ( ) (3) 과거를 되돌아 보면, 나는 실패 투성이라는 생각이 든다 ( ) (4) 과거를 되돌아 보면, 나는 완전한 실패자라는 생각이 든다 ( )
4-(1) 나는 예전에 즐겨 했던 것이 여전히 즐겁다고 생각된다 ( ) (2) 나는 예전에 즐겼던 것들이 예전처럼 즐겁지 않다 ( ) (3) 나는 예전에 즐겼던 것들이 즐겁지 않다 ( ) (4) 나는 예전에 즐겼던 것들이 매우 즐겁지 않고 싫증이 난다 ( )
5-(1) 나는 특별히 죄책감을 느끼지 않는다 ( ) (2) 나는 죄책감을 느낄 때가 있다 ( ) (3) 나는 죄책감을 많이 느낀다 ( ) (4) 나는 심한 죄책감에 시달린다 ( )
6-(1) 나는 벌받고 있다고 느끼지 않는다 ( ) (2) 나는 약간 벌받고 있다고 느낀다 ( ) (3) 나는 벌받고 있다고 느낀다 ( ) (4) 나는 심하게 벌받고 있다고 느낀다 ( )
7-(1) 나는 나 자신에게 실망하지 않는다 ( ) (2) 나는 나 자신에게 약간 실망하고 있다 ( ) (3) 나는 나 자신에게 많이 실망하고 있다 ( ) (4) 나는 나 자신이 심하게 실망스럽다 ( )

8-(1) 나는 잘못된 일이 생긴 것이 내 탓이라고 생각하지는 않는다 ( ) (2) 잘못된 일이 생긴 것은 약간 내 탓 인 것 같다는 생각한다 ( ) (3) 일이 잘못되는 것은 내 탓인 경우가 대부분이다 ( ) (4) 일어나는 모든 안 좋은 일은 내 탓이다 ( )
9-(1) 나는 자살같은 것은 생각하지 않는다 ( ) (2) 나는 자살할 생각을 가끔 하지만, 실제로 하지는 않을 것이다 ( ) (3) 자실하고 싶다는 생각이 자주 든다 ( ) (4) 나는 기회가 있다면 자살하겠다 ( )
10-(1) 나는 평소보다 더 울지 않는다 ( ) (2) 나는 예전보다 많이 운다 ( ) (3) 나는 요즘 항상 운다 ( ) (4) 나는 예전에 울고 싶을 때 울 수 있었지만, 요즘은 울려고 해도 울 기력조차 없다 ( )
11-(1) 나는 불안하거나 초조하지 않다 ( ) (2) 나는 조금 불안, 초조하다 ( ) (3) 나는 많이 불안하고 초조함을 느낀다 ( ) (4) 나는 너무 불안하고 초조해서 가만히 있기가 힘들다 ( )
12-(1) 나는 어떤 것에 관심을 두고 있다 ( ) (2) 나는 어떤 것에 관심을 주는 마음이 줄었다 ( ) (3) 나는 어떤 것에 관심이 거의 없어졌다 ( ) (4) 나는 어떤 것에 완전히 관심이 사라졌다 ( )
13-(1) 나는 예전처럼 무엇인가 결정 할 때 어렵지 않다 ( ) (2) 나는 예전보다 무엇인가 결정 할 때 어려움을 느낀다 ( ) (3) 나는 예전보다 무엇인가 결정 내릴 때 많은 어려움을 느낀다 ( ) (4) 나는 더 이상 결정을 내릴 수가 없다 ( )
14-(1) 나는 내가 예전만큼 가치 있다고 생각한다 ( ) (2) 나는 내가 예전만큼 가치 있는 것 같지는 않다 ( ) (3) 나는 내가 예전만큼 가치 있어 보이지 않아 걱정이다 ( ) (4) 나는 내가 전혀 가치 없는 사람 같다고 생각된다 ( )
15-(1) 나는 예전처럼 일할 수 있는 에너지가 있다 ( ) (2) 나는 예전처럼 일하기에는 좀 힘이 든다 ( ) (3) 나는 예전처럼 일하려면 나 자신을 매우 심하게 채찍질 해야만 한다 ( ) (4) 나는 전혀 아무것도 할 수가 없다 ( )

16-(1) 나는 평소처럼 잠을 잘 잔다 ( )
(2) 나는 평소처럼 잠을 자지는 못한다 ( )
(3) 나는 평소보다 나의 잠자는 패턴이 많이 변했다고 생각한다 ( )
(4) 나의 잠자는 패턴이 완전히 변했다고 생각 한다 ( )
17-(1)나는 짜증 (화)나지 않는다 ( )
(2) 나는 조금 짜증 (화)이 난다 ( )
(3) 나는 자주 짜증 (화)이 난다 ( )
(4) 나는 거의 매 순간 짜증 (화)이 난다 ( )
18-(1) 내 식욕은 평소와 다르지 않다 ( )
(2) 나는 요즘 예전보다 식욕이 좋지 않다 ( )
(3) 나는 요즘 내 식욕이 예전보다 아주 많이 떨어졌다고 생각한다 ( )
(4) 요즘 나는 아무 식욕이 없다 ( )
19-(1) 나는 예전처럼 일에 집중할 수 있다 ( )
(2) 나는 요즘 일에 집중하기가 조금 힘들다 ( )
(3) 나는 요즘 일에 집중하기가 너무 힘들다 ( )
(4) 나는 전혀 일에 집중을 할 수 없어 아무것도 할 수 없다 ( )
20-(1) 나는 평소보다 더 피곤하지는 않다 ( )
(2) 나는 예전보다 더 쉽게 피곤하다 ( )
(3) 나는 무엇을 해도 피곤하다 ( )
(4) 나는 너무 피곤해서 아무 일도 할 수가 없다 ( )
21-(1) 나는 요즘 성 (性)에 대한 관심에 별다른 변화가 있는 것 같지는 않다 ( )
(2) 나는 예전보다 성에 대한 관심이 줄었다 ( )
(3) 나는 예전보다 성에 대한 관심이 아주 많이 줄었다 ( )
(4) 나는 성에 대한 관심을 완전히 잃었다 ( )

설문 3. MSPSS (Multidimensional Scale of Perceived Social Support)

아래 문항에 대해 당신은 어떻게 생각하는지 해당 점수에 표시해 주기 바랍니다.

		전혀 그렇지 않다	그렇지 않다	별로 그렇지 않다	잘 모르겠다	약간 그렇다	그렇다	매우 그렇다
1	내가 어려울 때 나를 도와 줄 친한 사람이 주위에 있다.	1	2	3	4	5	6	7
2	나에게는 즐거움과 슬픔을 함께 나눌 친한 사람이 있다.	1	2	3	4	5	6	7
3	나의 가족은 나를 도우려고 노력한다.	1	2	3	4	5	6	7
4	나는 가족들로부터 도움과 정서적 지지를 받을 수 있다.	1	2	3	4	5	6	7
5	나에게는 나를 진정으로 편안하게 해줄 친한 사람이 있다.	1	2	3	4	5	6	7
6	나의 친구들은 나를 도우려고 노력한다.	1	2	3	4	5	6	7
7	나는 일이 잘못 될 때 의지 할 수 있는 친구들이 있다.	1	2	3	4	5	6	7
8	나는 내 문제들에 대해 가족들과 이야기 할 수 있다.	1	2	3	4	5	6	7
9	나에게는 즐거움과 슬픔을 나눌 수 있는 친구들이 있다.	1	2	3	4	5	6	7
10	나의 삶에 있어 나의 감정을 알아주는 친한 사람이 있다.	1	2	3	4	5	6	7
11	내 가족은 내가 결정할 수 있도록 기꺼이 돕는다.	1	2	3	4	5	6	7
12	나는 내 문제들에 대해 친구들과 이야기 할 수 있다.	1	2	3	4	5	6	7

APPENDIX K

ART THERAPY INTERVENTION MANUAL

Group Art Therapy
&
Self-care for Mothers of Children with Disabilities

Art Therapy Intervention Manual

Contents

Art Therapist Participation

Informed Consent Form:

Group Art Therapy and Self-care for Mothers of Children with Disabilities

Principal Investigator: Ji Hyun Lee, Co-researcher, Robyn Cruz, Professor, Lesley University Expressive Therapies Ph.D. Program

You are being asked to volunteer in this study to assist in my doctoral research in *Group Art Therapy and Self-care for Mothers of Children with Disabilities.* The purpose of the study is to examine the effectiveness of art therapy on the chronic pain experience.

Your participation will entail:

- You will be asked to participate in one day training workshop that will be facilitated by the researcher.
- You will be asked to carry out the 6 interventions over the course of 6 consecutive sessions.
- You will be asked to follow the directives that the researcher developed.

In addition

- You may choose to withdraw from the study at any time with no negative consequences.
- Your identifying details will be kept confidential by the researcher.
- Participation in this research poses minimal risk to the participants. The probability and magnitude of harm or discomfort anticipated in the research are no greater in and of themselves than those ordinarily encountered in daily life.
- If any problem in connection to the research arises, you can contact the researcher Ji Hyun Lee at _____ and by email at jlee17@lesley.edu or arttherapyformom@naver.com.

Confidentiality, Privacy and Anonymity:

You have the right to remain anonymous. If you elect to remain anonymous, we will keep your records private and confidential ***to the extent allowed by law****. We will use pseudonym identifiers rather than your name on study records. Your name and other facts that might identify you will not appear when we present this study or publish its results.*
If for some reason you do not wish to remain anonymous, you may specifically authorize the use of material that would identify you as a subject in the experiment. You can contact my advisor Dr. Robyn Cruz at rcruz@lesley.edu with any additional questions.
We will give you a copy of this consent form to keep.

My agreement to facilitate 6 art therapy sessions has been given of my own free will and that I understand all of the stated above. In addition, I will receive a copy of this consent form.

a) **Investigator's Signature**:

_____	_____	_____
Date	Investigator's Signature	Print Name

b) **Subject's Signature**:

I am 18 years of age or older. The nature and purpose of this research have been satisfactorily explained to me and I agree to become a participant in the study as described above. I understand that I am free to discontinue participation at any time if I so choose, and that the investigator will gladly answer any questions that arise during the course of the research.

_____	_____	_____
Date	Subject's Signature	Print Name

*There is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Committee at Lesley University, 29 Everett Street, Cambridge Massachusetts, 02138, Co-Chairs Robyn Cruz (*rcruz@lesley.edu) or Terry Keeney (tkeeney@lesley.edu).

Art Therapist Demographics Form

1. How old are you? ( ) years old

2. Gender (Male/ Female)

3. Educational background (Majors)

   - Bachelor's Degree:

   - Master's Degree:

   - Ph.D:

4. Do you have a credential? (Yes /No)

   Name of the credential: _____

5. Year of working experience as an art therapist? ( ) years

5. Do you have experiences of working with children of disabilities?

   (Yes / No)

6. Do you have experiences of working with parents of children with disabilities?

   (Yes / No)

Group Art Therapy Intervention

INTRODUCTION

This study includes six interventions, administered over a period of six weeks (a 100 minute- intervention each week). Each group art therapy intervention consists of three phases: 1) a preparation phase, including an introduction of the art materials, a conversation regarding the previous week's session, and a discussion about a theme or topic to work on (10 minutes); 2) a working phase, in which the individuals create artworks (60 minutes); and, 3) a group discussion phase, in which the participants give and receive feedback from other group members regarding their art products (30 minutes).

The group art therapy interventions are designed to help mothers increase their self-awareness of the sources of their parenting stress, encourage them to take an active role in developing coping strategies, enhance their psychological well-being, decrease their parenting stress, and increase their self- awareness of their strengths.

SESSION 1

Theme: "Who AM I"

Objectives: 1) Introduce art therapy

2) Introduce oneself to the group members-build rapport

3) Provide non-verbal, symbolic, and visual ways of communication

[1] Materials: 8½" x 11" white and colored paper, 12" x 18" white and colored paper, colored pencils, markers, oil pastels, and water paints

[2] Procedures:

[2-1] The art therapist introduces how the art therapy session will go

[2-2] Warming-up: In order to decrease participants' fears regarding their artistic skills, the therapist asks participants to draw scribbles using their non-dominant hand

[3] Art Task: "This Is Me"

Directives: "Draw yourself as a thing(s) or an animal that represents who you are."

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] The art therapist demonstrates to the participants how to talk about their art work, the art making process, and their ideas and feelings about the whole process.

[4-2] The therapist facilitates the group discussion with the following questions: 1) How does your drawing represent who you are? 2) Are you satisfied with your representation? 3) If you think of an object or animal that would have represented who you were in the past, what would it be?

[5] Closure:

The art therapist asks the participants if they have more things to share (talk about) with the group. If the participants don't need further discussion, the therapist finishes the session with a brief introduction of the topic for next week.

Session Fidelity Checklist 1 (Session 1)

Date:

Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure	**[2-1]**		
	[2-2]		
[3] Art Task			
[4] Group Discussion	**[4-1]**		
	[4-2]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.

SESSION 2

Theme: **Awareness of the causes of stress**

Objectives: 1) Identify and clarify causes of stress

2) Visualization of stressors

[1] Materials: 16 "x 20" white paper, glue, scissors, magazine photos, colored pencils, and markers Photocopy of the illustration (see the next page)

[2] Procedures:

[2-1] The art therapist provides about 10 minutes for sharing difficulties, stresses, and hardships that the participants have been experiencing for the past few weeks.

[2-2] Warming-up activity: The art therapist asks the participants to write down anything that gives them stress on their papers (illustrations).

[2-3] The art therapist introduces Magazine Photo Collage technique and demonstrates how to manipulate magazine photo images.

[3] Art Task: "I Am Stressed Out Because….."

Directives: "Please chose images from these magazine photos that represent your stressors and paste them onto your paper (the 16 "x20" white paper)."

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] "Take a look at the images that you chose. Please chose one image that makes you feel the most stressful."

[4-2] "Can you differentiate the causes of your stressors? For example, does your personality, a certain person, or certain circumstances make you stress out?"

[5] Closure:

The art therapist asks the participants if they have more things to share (talk about) with the group. If the participants don't need further discussion, the therapist finishes the session with a brief introduction of the topic for next week.

Session Fidelity Checklist 2 (Session 2)

Date:

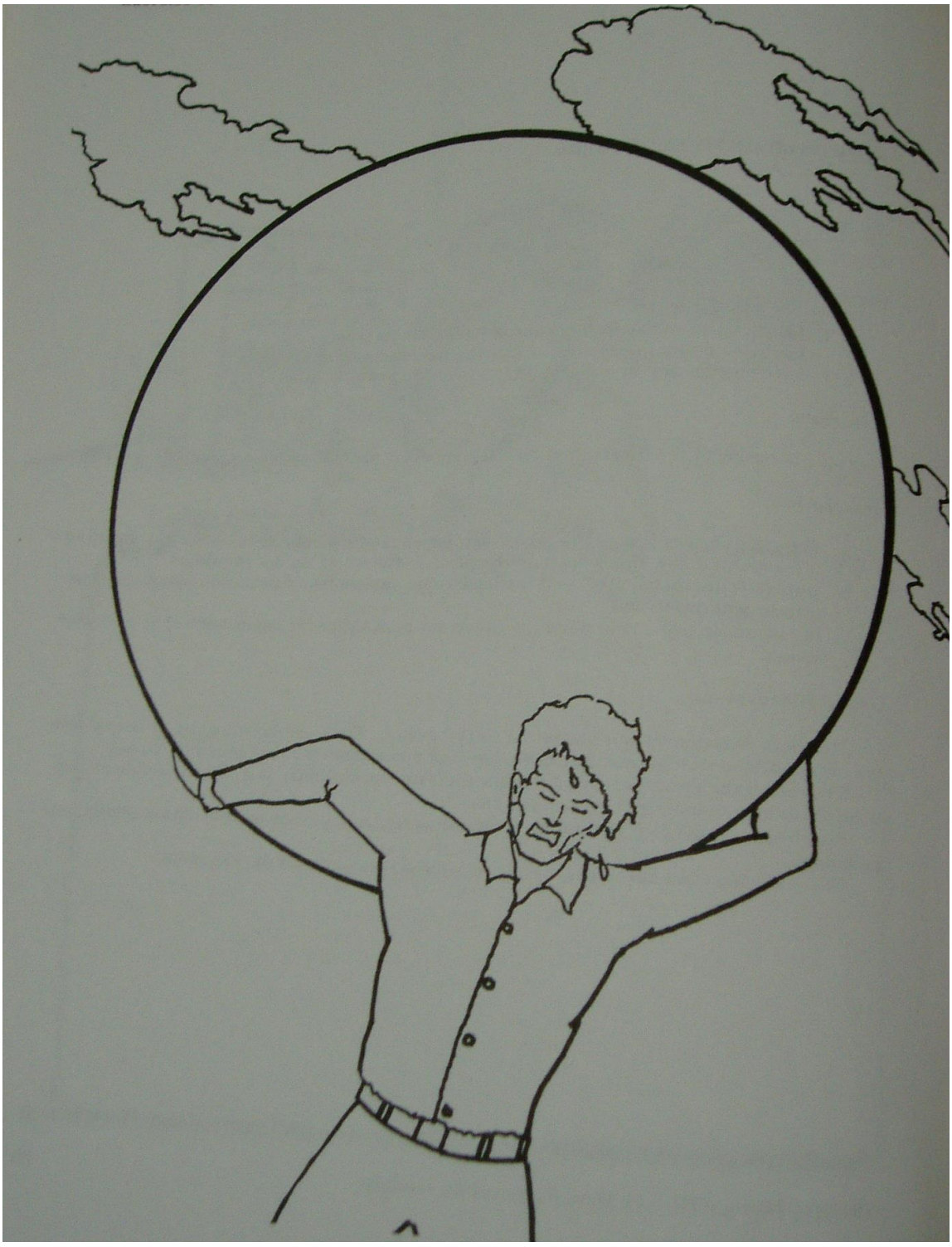
Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure	**[2-1]**		
	[2-2]		
	[2-3]		
[3] Art Task			
[4] Group Discussion	**[4-1]**		
	[4-2]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.



Handout for the Session 2 (Please make a copy of this illustration for the Warm-up)

Dossick, J., & Shea, E. (1995). *Creative therapy III: 52 more exercises for groups*. Sarasota, FL: Professional Resource Press.

SESSION 3

Theme: **Review of coping strategies (coping skills)**

Objectives: 1) Identify copying strategies (skills)
2) Evaluate coping strategies (skills)

[1] Materials: Various sized paper in assorted colors, colored pencils, markers, oil pastels

[2] Procedures:

[2-1] The participants review their art work from the last week,

[2-2] Warming-up activity: The art therapist encourages the participants to think of the most stressful occurrence of the last week from the collage image that they created in Session 2.

[3] Art Task: "My Coping Skills"

Directives: "Please draw how you have dealt with your parenting and life stress." (or, "Please draw what helps you to deal with stressful circumstances.")

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] "Which coping strategies have been successful and which ones were less successful?"

[4-2] "Do you have any coping skills that are no longer effective but used to be?"

[5] Closure:

The art therapist asks the participants if they have more things to share (talk about) with the group. If the participants don't need further discussion, the therapist finishes the session with a brief introduction of the topic for next week.

Session Fidelity Checklist 3 (Session 3)

Date:

Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure	**[2-1]**		
	[2-2]		
[3] Art Task			
[4] Group Discussion	**[4-1]**		
	[4-2]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.

SESSION 4

Theme: New (alternative) coping strategies (skills)

Objectives: To develop new and alternative coping strategies

[1] Materials: Various sized paper of assorted colors, colored pencils, markers, oil pastels, water color paints, brushes, found objects, decorative materials, glue, masking tape

[2] Procedures:

[2-1] Therapist will show the artwork from the last session and then ask if the participants used any of the stress coping skills that they drew in the last session.

[2-2] Warming-up: Guided Imagery

[3] Art Task: Stress-Free Place (Actual or Imaginative Place)

Directives: "Please create a safe (or stress-free) place for yourself. This place can protect you from stress, and you can always visit this place. This place can be an actual or an imaginative place."

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] "How did you feel while you were creating your stress-free, safe place?"

[4-2] "When (in what situations) can you think of this stress-free, safe place?"

[4-3] "If you had the chance to add more things to your stress-free, safe place, what would they be? "

[5] Closure:

The art therapist asks the participants if they have more things to share (talk about) with the group. If the participants don't need further discussion, the therapist finishes the session with a brief introduction of the topic for next week.

Session Fidelity Checklist 4 (Session 4)

Date:

Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure	**[2-1]**		
	[2-2]		
[3] Art Task			
[4] Group Discussion	**[4-1]**		
	[4-2]		
	[4-3]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.

SESSION 5

Theme: **Inner & Outer Strength**

Objectives: Awareness of strength

[1] Materials: Various sized boxes, glue, glue-gun, masking tape, scissors, materials for decoration, colored paper, markers, colored pencils, found objects, sticky notes

[2] Procedures:

[2-1] The therapist provides participants a few minutes to think of their strengths.

[2-2] Warming-up: The therapist distributes several sheets of sticky notes, then asks the participants to write down at least five words or short sentences regarding their strengths, their talents, or their favorite things.

[3] Art Task: "Strength Box"

Directives: "Please consider this box as a representation of you, and make a *strength box.* Decorate the inside of the box to represent your inner strengths, and decorate the outside of the box to show your outer (or visible) strengths."

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] "Which strengths that you possess help you to lower your stress?"

[4-2] "What do other people say about your strengths?"

[4-3] "Can you see strengths that other group members possess that could help you to cope with your stress?"

[5] Closure:

The art therapist asks the participants if they have more things to share (talk about) with the group. If the participants don't need further discussion, the therapist finishes the session with a brief introduction of the topic for next week.

Session Fidelity Checklist 5 (Session 5)

Date:

Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure	**[2-1]**		
	[2-2]		
[3] Art Task			
[4] Group Discussion	**[4-1]**		
	[4-2]		
	[4-3]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.

SESSION 6

Theme: **Review of personal growth and Reward for the growth**

Objectives: 1) Review of participants' artwork

2) Recognition of participants' personal growth

[1] Materials: the strength boxes from the last session, various sized colored paper, metallic markers, markers, colored pencils, decorative materials

[2] Procedures:

The therapist provides participants time to review their artwork from the last five weeks of sessions. The therapist asks if participants have memorable moments from the entire course of sessions. Also, the therapist asks if the participants have gained a new awareness of themselves through participation in the art therapy sessions.

[3] Art Task: Draw (make) symbols of protection and create a gift for self

Directives:

[3-1] "Please create symbols of the things that give you strength and a sense of protection and place them for storage in your strength box from last week."

[3-2] "Please create a gift for yourself for getting through life well."

[4] Group Discussion:

When the participants have completed their art task, each participant may share her work with the others in the group. Topics for discussion include:

[4-1] "How did you feel as you made symbols for protecting yourself and a gift for yourself?"

[4-2] "How can you make time for yourself to feel safe, relaxed, and less stressed?"

[5] Closure:

The therapist expresses appreciation to the mothers for their participation in the six sessions, and asks the participants how/where they will store their artwork.

Session Fidelity Checklist 6 (Session 6)

Date:

Attendance:

Absence:

Please check box for **YES** if you completed the directives in the Manual

		YES	NOTE
[1] Materials (I prepared all materials in the Manual for this session)			
[2] Procedure			
[3] Art Task	**[3-1]**		
	[3-2]		
[4] Group Discussion	**[4-1]**		
	[4-2]		
[5] Closure			
Total number of YES			

Comments: Please note if there were stand-out moments regarding participants' art products or/and the session in general.

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