

Lesley University

DigitalCommons@Lesley

Expressive Therapies Capstone Theses

Graduate School of Arts and Social Sciences
(GSASS)

Spring 5-21-2022

Siblings of Autism Spectrum Disorder and Art Therapy

Corinne Kelly

corinnekelly92@gmail.com

Follow this and additional works at: https://digitalcommons.lesley.edu/expressive_theses



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Kelly, Corinne, "Siblings of Autism Spectrum Disorder and Art Therapy" (2022). *Expressive Therapies Capstone Theses*. 631.

https://digitalcommons.lesley.edu/expressive_theses/631

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Expressive Therapies Capstone Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact digitalcommons@lesley.edu, cvrattos@lesley.edu.

Siblings of Autism Spectrum Disorder and Art Therapy

Capstone Thesis

Lesley University

4/11/2022

Corinne Kelly

Art Therapy

Carla Velazquez

Abstract

Focusing on the neurotypically developing siblings of child diagnosed with Autism Spectrum Disorder (ASD) is essential in order to understand how the diagnosis affects the family overall. Sibling relationships are essential in how a person develops in their family system, but due to the symptoms of the ASD diagnoses there can be challenges. By using a family systems approach, the present literature review discusses adjustment in the neurotypically developing sibling, the roles they take on in their family, and how art therapy can be used to alleviate some stressors for both the child diagnosed with ASD and their neurotypically developing sibling.

Keywords: sibling, neurotypical, Autism Spectrum Disorder, art therapy, family systems

Author Identity Statement: The author identifies as a straight-passing, queer, White woman from New England of mixed European ancestry.

Siblings of Autism Spectrum Disorder and Art Therapy

Introduction

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders describes Autism Spectrum Disorder (ASD) as a neurodevelopmental condition that experiences social, communication, and behavioral challenges (American Psychiatric Association, 2013, p. 50). Research by Callaghan and Sylvester states, “Since 2000, the Centers for Disease Control and Prevention estimates that the diagnosed prevalence of ASD among children has increased from 1 in 150 to 1 in 68” (Callaghan & Sylvester, 2019, p.1). This increased rate of diagnosis has pushed research to examine the impact on the family that cares for the child that is diagnosed with ASD.

ASD does not just affect those who have been diagnosed; it can have an effect on those living with said person. Cridland et al. (2014) wrote, “It is recognised that having a family member with ASD poses a range of distinct challenges on family members. Such challenges include, but are not limited to, accommodation of inflexible daily routines, lack of spontaneity, management of unique intolerances and sudden mood changes and being mediators in social interactions” (2014, p. 214). This can be challenging on the family unit. Cridland et al. (2014) specified, “Approximately one- third of individuals with ASD require assistance with self-care, mobility, communication and cognitive or emotional tasks on a daily basis; the majority of this care is provided by family members” (Cridland et al., 2014, p. 214). In some cases, “some families living with ASD report negative outcomes on family functioning, evidenced by higher levels of psychological problems, greater emotion rather than problem-focused coping strategies and higher family conflict” (Cridland et al., 2014, p. 214). Exploring these experiences is

essential in the overall understanding of the families and how they adapt and restructure to accommodate their family member diagnosed with ASD.

While looking at the family, it is necessary to consider the child with ASD and their relationship with their siblings. Emery stated, “Autism is a pervasive developmental disorder that is characterized by impairments in social interactions, interests and activities, and language development” (2004, p. 143). Because of these symptoms, it can be challenging to make connections without proper consideration of the child’s needs. Each child diagnosed with ASD is different with varied symptoms, needs, and abilities (Emery, 2004, p. 143). In some cases, that also may affect the family as they attempt to navigate those specific needs and create their own version of normalcy and homeostasis. Bachraz and Grace indicated, “Children with autism commonly experience difficulties with reciprocity in social exchanges and with communication. These difficulties are likely to affect family functioning and the manner in which sibling relationships are constructed” (2009, p. 317).

Focusing on the neurotypically developing siblings in the sibling dyad where one child is diagnosed with ASD is essential in the conversation about families with members who have ASD. According to Cridland et al. (2014), “[Family systems] approaches consider families as unique interactive and reactive units, with their own basic social system of rules, values and goals” (Cridland et al., 2014, p. 215). Growing up in the home can play a role in the way they function as children and later as adults. Children that grow up with a sibling with a developmental disability are more at risk of certain family strain, such as coming from a single-parent home (Saxena & Adamsons, 2013, p. 301). This is due to the stress that can occur on the marital relationship. They are more likely “to have had at least one parent working reduced hours or being unemployed [in order to care for the child with disabilities], and thus to have grown up

with both lower household income and higher bills accumulated in caring for the needs of the child with disabilities” (Saxena & Adamsons, 2013, p. 301). These circumstances can affect the neurotypically developing sibling especially if they are aware and invested in the conversations that may surround these charged topics or are needed to step up caregiving or emotionally supportive roles. Stoneman (2001) stated, “Siblings of children with disabilities may be especially sensitive to family conflict, reporting more negative emotional reactions and a greater tendency to perceive personal involvement in the conflict than [siblings from families without disabilities]” (Stoneman, 2001, p. 139).

There is a need to observe how neurotypically developing siblings exist in their family and in what roles they step into. Because families play a role in how people grow and learn, it is important to explore the family’s emotional climate. Investigating the way in which the neurotypically developing child understand and process the relationships between them and their siblings diagnosed with ASD is essential for further understanding of the family system. Saxena and Adamsons, claimed, “Failing to adequately identify and provide support for the unique needs of siblings of individuals with [developmental disabilities] could compound the risks such siblings experience over the life course” (Saxena & Adamsons, 2013, p. 301).

This capstone thesis aims to present a literature review on the neurotypically developing siblings of children diagnosed with ASD when viewed through a family systems framework. The roles they partake in as a member of their family and what potential future outcomes may result, as well as the adjustment they experience through living in their household will be explored. Art therapy will also be considered as a way of bringing light to the experiences of both neurotypical siblings and siblings diagnosed with ASD and allowing for expression without verbal communication.

Literature Review

Family Systems Framework

A family systems framework contextualizes the family based on the relationships between individuals and interpersonal relationships between members and how they affect the family as a whole. Research by Seligman and Darling (2007) states, “With systems theory, the family is seen as a complex and interactive social system in which all member’s needs and experiences affect the others” (p.17). Something that happens to one member of the family will affect everyone else in the unit in some way because family is the first influential system that a person will be a part. The family system can be broken up into subsystems, such as the spousal subsystem, which is interpersonal relationship between the parental figures, the parental subsystem which is the how the parents interact with the children in the family, and the sibling subsystem which is a person’s first peer group. Seligman and Darling (2007) claim, “Through this subsystem children learn how to provide mutual support, compete, negotiate with each other, and develop social skills” (Seligman and Darling, 2007, p. 24).

Sibling relationships are crucial to a person’s development. Saxena and Adamsons identified, “Evidence suggests that a person’s perception of sibling warmth can be a better predictor of self-esteem than perceptions of maternal warmth and responsiveness and closeness to siblings might be the single most significant predictor of an individual’s adjustment in later life” (Saxena & Adamsons, 2013, p. 302). These relationships that can be formed between siblings allows the person to grow and develop socially and can be more defining than their relationships with their mother. Saxena and Adamsons (2013) stated, “Older children develop social skills from their younger siblings, and younger siblings gain cognitive skills from older ones. In addition, responsive and supportive interactions between siblings can be a source of

secure attachment for younger siblings” (Saxena & Adamsons, 2013, p. 302). These sibling relationships show children how to interact with the world around them and can benefit everyone involved.

Sibling relationships can get complicated when one person has a be diagnosed with ASD. In order to connect to their sibling, neurotypically developing siblings have a tendency to step up and do the brunt of the work to assist connection. In order to expedite a close relationship these children must spend significant time together. Stoneman stated, “Through their ongoing interactions with a sibling with a disability, typically developing siblings who develop high-quality sibling relationships are able to negotiate role relationships that accommodate their siblings’ disabilities and facilitate social interaction” (Stoneman, 2001, p. 137). As the children age it can become harder to spend developmentally appropriate time together. Stoneman (2001) suggested, “The more severe the skill deficit experienced by these children, the larger are the discrepancies between their play levels and those of their siblings and the harder these discrepancies appear to be for the children to overcome” (Stoneman, 2001, p. 135). The neurotypically developing child may find it harder to relate in the same way with their sibling with ASD so their relationship begins to change and a gap between them can form if they cannot adapt to new ways of interaction.

If the neurotypically developed child is younger in birth order, the relationship does not follow typical developmental stages, and puts the younger neurotypically developing child in a more dominant role. Stoneman (2001) claimed, "Interactions between children and their older siblings with disabilities have been found to be characterized by younger sibling dominance, while comparable interactions between typically developing siblings follow a more normative

pattern of older sibling dominance” (Stoneman, 2001, p. 137). This does not happen as often in neurotypically developing families. Stoneman (2001) clarified, “Sibling role relationships during childhood tend to be asymmetrical. Older brothers and sisters assume more powerful, dominant roles in relation to their younger siblings. With age, role relations between typically developing siblings become increasingly symmetrical”. (Stoneman, 2001, p. 137). This comparison shows that the sibling relationships in families with those with ASD have a more complicated trajectory.

Laghi et al. (2018) conducted a study to investigate how sibling relationships are impacted by family functioning, defined as the ability to manage stressful events, and intimate and social relationships; family satisfaction, in which family members feel happy and fulfilled with each other; and demographic characteristics when one sibling has been diagnosed with Autism Spectrum Disorder. The study involved 86 siblings of early-adolescents, adolescents and young adults with ASD where 52 siblings were older, 30 were younger, and 4 were twins. The participants were asked to complete four questionnaires: the Italian adaption of Network of Relationships Inventory: Behavioral Systems Version, the Family Adaptability and Cohesion Evaluation, the Family Communication Scale, and Family Satisfaction Scale.

The results published by Laghi et al. (2018) stated, “The youngest age group reported to engage more frequently in negative behaviors with their siblings with ASD than the two older age groups” (Laghi et al., 2018, p. 797). It is believed that this is reinforced by more act daily contact which would allow for more moments of disagreement. Because it is assumed that the family sphere takes up a majority of the social relationships of children still living in the house, negative interactions have the potential to occur more often. Spending more time together,

according to Laghi et al. (2018), “May increase the likelihood that quarrels and overt conflicts may take place. At the same time, the possibility to share different moments of the day may constitute for brothers and sisters a way to train on attachment-related behaviors” (Laghi et al., 2018, p. 798). The neurotypically developing siblings seem to respond to their siblings based on family satisfaction and age.

Adjustment of Neurotypically Developing Siblings

Due to the circumstances on family system, the adjustment of neurotypically developing siblings may be affected. Rodrigue (1993) claimed, “The importance of examining the psychological functioning of siblings ... has been highlighted by the apparent disruption and subsequent reorganization of family structure and functions often necessitated by the presence of a child with special needs” (Rodrigue et al., 1993, p. 665). Usually families need to adjust in order to accommodate the child diagnosed with ASD, and the neurotypically developing sibling can undergo challenges as a result. Rodrigue et al. (1993) claimed, “[Neurotypically developing] siblings may experience numerous stressors, including loss of parental attention, changes in family roles, structure, and activities, identification with the handicapped child, feelings of guilt and shame, and the negative reactions of others outside the family” (Rodrigue et al., 1993, p. 666).

Rodrigue et al. (1993) conducted a study focused on sibling adjustment comparing children with siblings who were diagnosed with ASD or down syndrome to siblings with neurotypically developing children. There were 19 siblings of those with autism, 20 siblings of those diagnosed with down syndrome, and 20 siblings of children who are neurotypically developing. Rodrigue et al. (1993) state, “targeted children were matched on the basis of mental

age, rather than chronological age, to guard against a possible confound of disability and adaptive behavior” (Rodrigue et al., 1993, p. 668). The siblings were tested using the Perceived Competence Scale for Children where their cognitive competence, social competence, physical competence, and self-esteem were and the Child Behavior Checklist were studied. They also did the Children Behavior Checklist where their social skills, activities, relationship patterns, school performance, and general psychological development were considered. Parents also filled out the Marital Adjustment Scale (Rodrigue et al., 1993).

These tests resulted in the siblings of those with ASD did not differ from siblings of those with Down syndrome or neurotypically developing children in self competence or social competence. Although the study stated, “Siblings of children with autism had more internalizing and externalizing behavior problems when compared to the other siblings in this study, their mean scores on these two dimensions of the [Child Behavior Checklist] fell within the normative range” (Rodrigue et al., 1993, p. 671). The siblings of children diagnosed with ASD may be vulnerable to adjustment challenges, but only marginally. Based on the data presented in the study, sibling age and marital satisfaction are associated with adjustment difficulties. The study suggests, “Older sibling age was related to higher rates of both internalizing and externalizing behavior problems in siblings of children with autism” (Rodrigue et al., 1993, p. 672). This leads one to believe that older children have a harder time adjusting due to the changes in the family system when their younger sibling with ASD arrives. Rodrigue (1993) claimed, “older children may be more likely to be held responsible for domestic chores and partial care of the disabled child, thus promoting additional stress” (Rodrigue et al., 1993, p. 672).

Under a family systems lens, both siblings inevitably affect each other. Hastings et al. (2014) conducted a study that focused on the adjustment of neurotypical developing siblings and how it affects the child with ASD. It also studied how the mental health of their mothers affects the child with ASD. They stated, “We adopted a longitudinal design to explore whether maternal mental health (specifically depression) and sibling psychological adjustment (behavior problems and pro-social behavior) might predict the behavior problems and pro-social behavior of children with autism over time” (Hastings et al., 2014, p. 1517).

This study consisted of sixty families consisting of a mother, a child diagnosed with ASD, and at least one sibling. A component of this study involved the mothers’ completion of the 4–16 years, parent version of the Strengths and Difficulties Questionnaire twice in order to assess the behavior problems and pro-social behaviors. The first round of the questionnaire evaluated both children while the second time, two to three years later, only focused on the child diagnosed with ASD. The subscales considered in the questionnaire were emotional behaviors, conduct behavior, peer problems, hyperactivity, and pro-social behavior which could be attributed to being helpful or caring.

The information that the mothers gave was different than what was expected by the researchers. The results proposed that sibling pro-social behavior did not predict later psychological adjustment for the child with ASD. However, the investigation showed, “Sibling behavior problems predicted the behavior problems of the child with autism over a 2.5 to 3-year period” (Hastings et al., 2014, p. 1519). These findings are essential to the better understanding of the sibling dynamic between children diagnosed with ASD and their neurotypically developing siblings. Hastings et al. claimed, “The present results suggest that children with

autism may be at risk for increased behavior problems over time when their siblings have significant levels of behavior problems (Hastings et al., 2014, p. 1519). This effect would change the way that people viewed these sibling dyads because in practitioners are used to considering how the sibling would be affected by their sibling with ASD. They wrote, “Our results indicate that a direction of impact from sibling to child with autism also needs to be considered” (Hastings et al., 2014, p. 1519). Acknowledging and continuing this new research could change the way that the world perceives these types of sibling dyads and how they both affect each other.

When there are more siblings than just the child diagnosed with ASD and the neurotypically developing sibling, the sibling relationship is likely to look different. Bachraz and Grace (2009) conducted a case study on three different families that consisted of three siblings, where the focus NTD child was the youngest, the child with ASD was the middle child, and there was an oldest NTD child. There were four visits made to each family. In the first visit, the parents were interviewed and “were asked to talk about how the sibling relationships in particular both influenced and were influenced by the daily routines that made up their lives” (Bachraz & Grace, 2009, p. 320). They were also asked when the siblings interacted the most and two observation sessions were then conducted. In the third visit, the focus child took pictures of the things they liked to do with their sibling, which were then used to discuss their sibling relationships during an interview in the fourth meeting. These interviews focused on routines of the family and the sibling relationships with the child with ASD and their other sibling (Bachraz & Grace, 2009).

The results showed that the focus child did not have as strong of a connection to their sibling with ASD. Because the families observed had an older neurotypically developing child as well as the focus younger neurotypically developing child, there was a closeness between them that was related to the amount of parental time needed with the child with ASD. “The relationship with the sibling who has autism did not demonstrate the same intimacy as was evident in the relationship between the typically developing siblings” (Bachraz & Grace, 2009, p. 322). The child’s disability did not necessary directly create the lack of connection. Bachraz and Grace state, “While the language and social competencies of the child with autism have a significant impact, it is also clear that family dynamics play an important role in shaping sibling relationships” (Bachraz & Grace, 2009, p. 322).

Roles of Neurotypically Developing Siblings

The family systems framework gives space to explore the roles that neurotypically developing siblings practice in their households. Bachraz and Grace (2009) explained, “the children were not always held to the same standards, with the typically developing siblings having to compromise in favour of their sibling with autism at times” (Bachraz & Grace, 2009, p. 323). Neurotypically developing siblings are expected to adjust in order to make things simpler on the family which can begin early in the sibling relationship when they move faster through developmental stages than their sibling diagnosed with ASD. Stoneman (2001) asserted, “When a child teaches or helps another, that child has assumed a dominant role, with a reciprocal, nondominant role being assumed by the other child” (Stoneman, 2001, p. 138). This asymmetrical relationship can be carried out through the rest of their relationship, through childhood and adulthood. Stoneman (2001) emphasized, “For younger siblings, assuming ascribed caregiving roles [such as helping with feeding, babysitting] is quite dissimilar to the

roles that are normative for younger siblings” (Stoneman, 2001, p. 138). This begins to create a different set of experiences that these neurotypically developing children may experience compared to families who do not have a person diagnosed with ASD.

In families without a child diagnosed with ASD, older siblings tend to take on more responsibility but that eventually plateaus as the younger sibling grows up. The older sibling can step up in order to help the youngest child grow and learn. Siblings of individuals with developmental disabilities, regardless of their birth order, spend more time in caregiving activities than siblings of typically developing children. In these cases, the shift to an equal relationship is less likely to occur due to the continued aid needed throughout the lifespan for sibling with developmental disabilities. “It has been documented that the most involved sibling is older than their sibling with developmental disabilities, and even from a young age, the sibling often becomes skilled in helping the younger child; this continues throughout the adult years” (Saxena & Adamsons, 2013, p. 304).

Although there are added stressors on these children, Stoneman (2001) claimed, “there is no evidence that the asymmetrical interactional roles experienced by these children are harmful, either to the individual siblings or to the sibling relationship” (Stoneman, 2001, p. 138). These relationships are not necessarily a bad thing, and there are a lot of positive outcomes that can result, but it relies on the acceptance of that role. “Satisfaction with interpersonal relationships is, in part, a function of the ability of the participants to negotiate mutually acceptable roles and to enact those roles in a quality manner” (Stoneman, 2001, p. 138). Finding meaning in their caregiving roles is an important component to having a more positive relationship with the tasks required and in turn their relationship with their sibling diagnosed with ASD. When there is not an appropriate level of self-acceptance of the neurotypically developing sibling’s family position,

or if the requirements are just too high, the child can struggle significantly. Saxena and Adamsons (2013) claimed, “Continuing to provide longer years of caregiving might not necessarily be negative for siblings’ developmental outcomes or attainment of life goals, yet it can pressure the siblings to mature earlier and compromise on their personal interests” (Saxena & Adamsons, 2013, p. 302).

Cridland, et al. (2016) performed a study that focused on three families, each with a neurotypically developing adolescent sister and younger adolescent brother with ASD. Through family interviews, the sisters discussed their roles at school and at home, the pull between distance and engagement with family, and their feelings toward having a brother with ASD. The researchers state, “Questions were designed to elicit both positive and negative experiences, attitudes, and feelings. To investigate participants’ perceptions about other family members’ experiences, we asked a range of socioemotional inference questions, which assessed an individual’s understanding of another’s experience” (Cridland et al., 2016, p. 198).

The results showed that the sisters had complex feelings toward their families and their expected roles. In the school setting, their role was “advocating for their brother with teachers and peers, liaising between the teachers and their parents, managing miscommunications, protecting their brother from bullies, and educating their brother about how to deal with other students” (Cridland et al., 2016, p. 200). At home, these sisters noticed a discrepancy in the chore breakdown. This disparity between chore expectation was not displayed in some parent reactions. These parents felt that there was no discrepancy between the siblings’ responsibilities and even felt that the neurotypically developing child did not continue their caregiving roles they participate at school when they were at home (Cridland et al., 2016, p. 200).

They also spoke of experiencing tension between engaging and distancing themselves from the family unit but specified the need of one-on-one time with parents. They showed signs of positive meaning making and acceptance of their brother's diagnosis despite struggling with their brother's special treatment, lack of social conventions, and their brother's rigidity (Cridland et al., 2016). Some neurotypically developing siblings feel that they have less attention from their parents their siblings with ASD have and may "perceive parents as having limited time to listen to them or feel guilty about asking for help given their siblings' significant support needs" (Cridland et al, 2016, p. 203).

As neurotypically developing siblings age, it is probable that they will take on more responsibility in care tasks for their siblings diagnosed with ASD and in the family. Stoneman (2001) specified, "There is some evidence that when the demands of childcare roles become too extreme, negative outcomes can result for individual siblings and for the sibling relationship" (Stoneman, 2001, p. 138). In some cases, this can be described as parentification, when the child takes on responsibilities that are usually reserved for adults. Depending on the household, parentification can be described as emotional support, completion of household chores, or direct care for family members both parents and siblings alike. In some ways, this can be a considered beneficial because it teaches the child responsibility and maturity, but persistent parentification can also lead to negative emotional outcomes such as anxiety and depression (Tomeny et al., 2017). There are two ways that children may experience parentification. Parent-focused parentification describes the way that children care for their parents. Nuttall et al. (2018) claimed, "When parents are the source of familial stress and children respond by providing care to parents, parents may be unable to provide the scaffolding necessary to support children in coping with caregiving roles (Nuttall et al., 2018, p. 1200). Sibling-focuses parentification

depicts the caregiving done by the child for their sibling which according to the information Nuttall et al. (2018) stated, “appears to lead to the development of prosocial behaviors and positive familial relationships” (Nuttall et al., 2018, p. 1201).

Tomeny et al. conducted a study to examining different types of parentification that Neurotypically developing siblings experienced in childhood and the potential connection to current distress and attitudes toward their sibling relationship. The participants partook in four questionnaires: Demographic and Diagnostic Questionnaire, the Parentification Inventory, the Lifespan Sibling Relationship Scale, and the Depression, Anxiety, and Stress Scale. The research focused on two types of parentification, parent-focused and sibling-focused.

The results of the questionnaires were multifaceted. Tomeny et al. stated, “Those who reported having to engage in childhood tasks for their parents, such as providing emotional or physical care, also reported higher levels of current anxiety and stress” (Tomeny et al., 2017, p. 1063). Taking care of a parent could have a detrimental effect on future anxiety compare to taking care of a sibling. Tomeny et al. claimed, “Although they were more likely to report higher stress, [the participants] who reported engaging in childhood tasks related to caring for their siblings were more likely to report more positive attitudes about their relationship with their sibling with ASD” (Tomeny et al., 2017, p. 1063). It can be assumed that through theses care tasks the sibling relationship is strengthened while taking care of parents can predict more anxiety as the child ages. Sibling relationships can benefit from sibling-focused care tasks because they spend more time together and have opportunities to have positive interactions (Tomeny et al., 2017).

Nuttall et al. conducted a study that focused on parentification experiences of neurotypically developing siblings growing up and their current intentions to provide future care for their siblings diagnosed with ASD. Young adults filled out three questionnaires; the Parentification Inventory, Autism Benefit Finding Scale, and Intention for Caregiving Involvement in the Future; in order to predict their role in care giving in the future. The research showed, “emerging adult TDS who experienced higher levels of parent-focused parentification perceived fewer benefits in their role in their family and, in turn, expressed less intention to provide caregiving involvement for their sibling with ASD in the future” (Nuttall et al., 2018, p.1205). Though it is a relatively small subset of the data, the correlation between parent-focused parentification and less future care-giving intention is something to consider.

Art Therapy for Neurotypically Developing Siblings

Art therapy can be an effective tool for neurotypically developing siblings. Durrani et al. (2014) stated, “The fundamental belief that underpins art therapy is that arts-based mediums and the creative process all possess inherent qualities of healing that can access and affect unconscious processes inaccessible through verbal forms of expression” (Durrani et al., 2014, p. 102). Art therapy is a therapeutic intervention that relieves emotional distress and provides support in a judgement free environment. Due to the potential family dynamics when one child is diagnosed with ASD, the neurotypically developing sibling may need extra support in order to ease stressors such as including differential parental treatment, feelings of guilt or shame, or changes in family roles. Murray Law (2020) claimed, “Parents can get so occupied by caring for and working around the affected sibling that they may sometimes overlook the other one”

(Murray Law, 2020, p. 53). Art therapy can be a valuable tool for the neurotypically developing sibling to process those feelings.

Kang et al. (2021) conducted an experiment focused on the use of an art therapy group in nature with siblings of children diagnosed with ASD. Over the course of eight weeks, the experimental group participated in weekly 60-minute group art therapy sessions whereas the control group was allowed to simply explore outside in the wilderness (Kang et al., 2021, p.3). The sessions started with ten minutes to find their location on the mountain to create, then asked to use the materials from their surroundings and work for forty minutes, and the last fifteen minutes were used to discuss their pieces (Kang et al., 2021, p.4). Pre-tests and post-tests involved an electroencephalogram focusing on the attention quotient defined as the brain arousal and resistance to stress or disease and the anti-stress quotient representing the physical and mental fatigue caused by internal and external environment factors. The participants also did pre-test and post-test questionnaires focusing on stress and self-esteem (Kang et al., 2021, p.5).

At the end of the study, the experimental group had positive changes in brain waves in both the attention quotient and the anti-stress quotient, resulting in higher stress resistance, stress relief, and stronger immune system, whereas the control group had no significant changes (Kang et al., 2021, p.7). Kang et al (2021) state, “The causes and consequences of stress lower hippocampal function, resulting in the loss of neuroplasticity and long-term neurobiological disorders, which can negatively affect the ability to learn and change” (Kang et al., 2021, p.8). The experimental group had higher levels of self-esteem and the control group had no significant change. Kang et al. (2021) declare, “High self-esteem means that one gives high value to oneself, recognizes one’s strengths, has positive feelings, and has high confidence in daily life” (Kang et

al., 2021, p.8). Giving these children an outlet to explore their emotions where their peers could validate their experiences allowed them the opportunity to process and let go of the stress they endured.

Because art therapy has not been highly researched in regard to neurotypically developing siblings of children diagnosed with ASD, looking at how it has been used with siblings of children with other illnesses, disorders, or disabilities could illuminate the potential it could have. In some cases, a person's illness, disorder, and disability can have a large effect on the family system as a whole and the siblings may have a lack of support. Siblings without the condition may feel similarly to neurotypically developing siblings. Raghuraman (2002) conducted an art support group for the siblings of children with significant hearing loss. The siblings that joined were aged 6-11 years old and attended a summer support group in San Diego, CA. These groups gave the children an opportunity to explore their experiences with people who they could relate while investigating their individuality as well as their place in their family system. Raghuraman stated, "Through the freedom and spontaneity inherent in art making, the siblings learned alternative ways of communicating their feelings to their parents, their brother or sister and to peers and friends" (Raghuraman, 2002, p. 205).

In this art group, the children were directed to draw a family picture using pastels, markers, colored pencils, and crayons. After the completion of the directive, the participants were asked to discuss their artwork. Raghuraman explained, "By talking about family and its importance to them, siblings had a chance to address their role in the family without the focus falling on their sibling" (Raghuraman, 2002, p. 206). These ideas were expanded on in another directive where the group was asked to draw positive or negative feelings about their interactions

with their sibling with hearing loss. This gave the children the space to process some of the challenges and strengths they experience as a family and as a sibling dyad.

One art directive involved making a self-portrait where each child was traced onto a large piece of paper and where they then decorated themselves. Raghuraman claimed, “This drawing appeared to strengthen the siblings’ self-esteem; they were recognized for themselves, as unique individuals, not in the context of their family or as compared to their brother or sister” (Raghuraman, 2002, p. 207). This directive gave the children a way of exploring their individuality in a physical way without considering their role in their family or how they are affected by their sibling.

One of the most important activities done in the group consisted of developing a feeling chart. Using age appropriate language, the group was able to decipher which feelings they experience and how to discuss them with those around them. After working on the Feeling Chart, Raghuraman reported, “Many learned new words or meanings for their feelings that they had not understood or had not been able to express previously” (Raghuraman, 2002, p. 208). Being able to vocalize their emotions to those around them is essential.

The work done by Raghuraman can be used to explore the relationship between siblings and their emotional responses to having a sibling with a disability. While it does not mention ASD, it does discuss how art can be an avenue for showing the effects of a disability on their sibling. Through this study, it showed that siblings can use art as an alternative to talk therapy as a means of exploration of their feelings. Sometimes words can be hard to say to people that are important, so finding other ways of expression are essential.

Wallace et al. conducted an art therapy study focusing on siblings of pediatric hematopoietic stem cell transplant patients. Wallace et al. (2014) stated, “The psychosocial

adjustment of siblings of children with cancer showed that siblings experienced posttraumatic stress symptoms, negative feelings... and a decrease in their quality of life” (Wallace et al., 2014, p. 4). This is aligned with some of the experiences of neurotypically developing siblings. Both types of siblings experience intense feelings around their sibling’s diagnosis. As a result, Wallace et al. (2014) claimed, “Siblings often struggle with thoughts, feelings, and questions about themselves and their brothers’ or sisters’ disease that may be difficult to verbalize due to fear and anxiety, a limited vocabulary, or a desire to protect those around them from hurt and sadness” (Wallace et al., 2014, p. 5).

The siblings of pediatric hematopoietic stem cell transplant patients faced isolation from their families because of the long hospital stays for the sick child and experience posttraumatic stress symptoms, negative feelings such as shock, fear, sadness, guilt; and a decreased quality of life. They were also at risk of developing psychosocial problems, anxiety, and low self-esteem. The goal of the study was to incorporate art therapy so that the siblings would receive care and support that would offer nonverbal communication, an emotional outlet, and empowerment (Wallace et al., 2014).

The study collected data three times over the course of three months; one week after the sick child’s procedure, one after the procedure, and three months after the procedure. The control group and experimental group would complete self-report measures that asked questions involving anxiety, posttraumatic stress, self-concept, and family functioning. The experimental group would participate in individual art therapy sessions and then complete the self-report measures. The first art therapy session was making feeling mandala using tempera paint and fine line markers and made a mandala with different colors that that represented their sibling’s

procedure. The activity's goal was to give the sibling a place to voice their feelings and thoughts with validation and support from the art therapist. The second session explored the changes in family functioning through the transplant process and the future hopes from the family. This activity gave the sibling an opportunity to vent about their experiences and process the challenges they faced. The third session explored self-exploration with Model Magic clay, googly eyes, and markers through the metaphor of what animal the sibling would want to be during the sick child's medical process. The discussion afterward involved qualities, characteristics, and coping powers of the animals and how the siblings could relate in their own experiences and where their strengths were apparent. The control group also participated in this activity after they completed their final self-reporting (Wallace et al., 2014).

The results of the study suggested that the group that utilized art therapy had decreased posttraumatic symptoms and less stress symptoms although there was no significant change in anxiety or self-concept. It suggests that the siblings were able to use art therapy to process their emotional reactions without resorting to words, which is important because younger children may not have the language to effectively discuss their feelings, and older children may be experiences feelings that are challenging to discuss and name. Wallace et al. state, "It is possible that art therapy assisted in reintroducing control into the healthy siblings' life and allowed them to express and process the challenges and changes that they were experiencing" (Wallace et al., 2014, p. 10). Art therapy sessions seemed to act as a safe way of containing the emotional events and responses.

This study is important when considering neurotypically developing siblings of children diagnosed with ASD. Both groups have the potential of high stressors while experiencing

feelings of isolation due to parental focus on their siblings. By viewing the effects of art therapy on the siblings of pediatric hematopoietic stem cell transplant patient, it can be expected that neurotypically developing siblings would also benefit.

Art Therapy for Autism Spectrum Disorder

Art therapy can be a useful tool in developing nonverbal communication when working with children diagnosed with ASD. This could be useful in building a better, more effective relationship between children diagnosed with ASD and neurotypically developing siblings. Kang et al. (2021) asserted, “Art therapy is used to improve cognitive and sensorimotor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change” (Kang et al., 2021, p.2). Due to sensory dysfunction and issues with self-regulation it may be harder for people diagnosed with ASD to connect with others. Durrani (2014) stated “[It could] result in a child with autism suffering from an impaired capacity to attach to caregivers and being impeded from optimal communication and exchange with the environment” (Durrani, 2014, p. 100)

Finding ways to work through some of sensory dysfunction and challenges with self-regulation could open the door for clients with Autism to build more enriching relationships. That work can be done by utilizing art therapy. Durrani (2014) explains, “Because art therapy is a multisensory, multifaceted approach, it can be tailored to the individual needs of a particular child with autism” (Durrani, 2014, p. 100). Art therapy can be used as a form of non-verbal communication which can be beneficial for clients with Autism due to their potential challenges in language and communication. Durrani states, “Through attunement of the art therapist and the child’s own sensory experience, autistic children can also improve their imitation skills, motor

skills, and coordination. These skills can further bolster emotional awareness and understanding, emotional regulation, and social skills” (Durrani, 2014, p. 103).

Durrani (2014) conducted a case study exploring the use of art making as a means of sensory dysfunction and attachment with Tom, a twelve-year-old boy diagnosed with ASD. When the art therapist began sessions with the client Tom, he had minimal eye contact, did not focus on shared objects, and had little receptive. It was stated, that this showed “Tom’s problems with attachment because children on the autism spectrum who are securely attached are more likely to engage in joint attention, have better receptive language, and make requests more frequently than children with autism who are insecurely attached.” (Durrani, 2014, p. 104). The therapist made art in front of Tom to familiarize him with the materials. Over the course of the first few months, the therapist worked toward building rapport until Tom was comfortable painting, and he then began to make more eye contact, lengthen his sustained attention to artmaking, and explore sensory aversions. After six months, Tom was able to choose the medium, color, and tools he wanted to use in the session. Durrani (2014) stated, “he was also able to indicate when he wanted to end the session and go home by humming his goodbye song and waving his hand” (Durrani, 2014, p. 106). Tom was able to find ways to communicate due to what is believed to be the rapport built through art making. At eight months, Tom’s dad set up an art space in his home where he would create as long as his nanny sat with him suggesting “some evidence that Tom was connecting his enjoyment with art-making with his conscious experiences of human connection” (Durrani, 2014, p. 106). Art making in a safe environment appeared to unlock new means of communication for Tom. Durrani (2014) claimed, “[Art making], ... may have lowered his anxiety level and created an opportunity for him to bond with

the therapist while using a communicative medium other than a verbal one” (Durrani, 2014, p. 106).

Emery (2004) published a case study about one of her clients who had been diagnosed with ASD. Through their work, the six-year-old boy was able to develop through some stages of drawing, object constancy, and improved language development. The boy played with play dough in different ways, used a puppet to communicate in a less high pitched and mechanical way, and started to draw figures with necks. He also began to develop more confidence as he moved away from basing drawings off of real objects and developed his own schemas. Emery (2004) claimed, “The use of nonverbal expression through the experience of making art encourages children with autism to begin to represent their experiences. (Emery, 2004, p. 147).

Emery’s work could be used to show the responsiveness that is possible through art therapy intervention with those diagnosed with ASD. Emery (2004) explained, “Art therapy for [neurotypically developing] or autistic children may serve as a path toward increased awareness of the self. The sense of self remains a cornerstone for relating” (Emery, 2004, p. 146).

Discussion

Focusing on the neurotypical sibling is essential in order to help not only the individual, but also the family as a whole. Under a family systems framework, it becomes clear that the child has the ability to affect their parents as well as their sibling diagnosed with ASD. The information that has been presented by the aforementioned researchers has suggested that the potential unpredictability and complexity that symptoms of ASD display affect not only the sibling relationship but also will drastically affect the psychological development of the neurotypically developing sibling. Every sibling relationship has its own set of challenges and benefits, but especially when one person is neurotypically developing and the other has ASD,

there are intricacies worth further investigation. This information could be used to understand the family system and how it would come together as a whole. Fostering a healthy relationship between the siblings is a necessary step in alleviating stressors on the family system.

Neurotypically developing siblings of children diagnosed with ASD have specific experiences worth further exploration. Because of the circumstances they grow up in, there is a possibility of challenges in their adjustment. They may feel that their siblings have higher needs so they do not want to add more, or even that they do not receive the same treatment as their sibling diagnosed with ASD. They also have complex relationships with the roles that they partake in the family system. Rodrigue et al. (1993) stated, “Problems may develop for the sibling because increased parental expectations are not always accompanied by increases in parental time and attention” (Rodrigue et al., 1993, p. 672). In some cases, these neurotypically developing siblings take on care giving roles for the child diagnosed with ASD and the parents, resulting in more stress.

Based on the information presented it is clear that art therapy would be a helpful tool for not only the neurotypical sibling, but also the child diagnosed with ASD. Art therapy can be utilized to assist the neurotypically developing sibling process their feelings while relieving stress. The child diagnosed with ASD can build connection nonverbally through the artistic therapeutic implementation designed for their specific needs. Art therapy under a family systems framework can also be a way for the siblings to come together therapeutically. The Murray Law (2020) stated, “Siblings with and without ASD need strategies to relate to each other—to help themselves and the functioning of the family as a whole.” (Murray Law, 2020, p.51) Creating a

visual line of communication would help the bond between them, while also giving the siblings an opportunity to explore through their own experiences and feelings.

The research presented illustrates the need for therapeutic intervention to assist neurotypically developing siblings with the aim that they have a higher possibility of positive adjustment and lower stress as they age. Published works focusing on the neurotypically developing siblings are essential in understanding the family system as a whole. Art therapy can be affective for neurotypically developing siblings, but there is little current research that focuses on the implementation of art therapy that functions under a family systems framework. Further investigation is necessary to see the direct impact on these siblings and subsequently the family system as a whole.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.)
- Bachraz, V. & Grace, R. (2009). Creating a Different Kind of Normal: parent and child perspectives on sibling relationships when one child in the family has autism spectrum disorder. *Contemporary Issues in Early Childhood*, 10(4), 317–330.
- Callaghan, T., & Sylvester, S. (2019). Autism spectrum disorder, politics, and the generosity of insurance mandates in the United States. *PLoS ONE*, 14(5), 1–22.
- Cridland, E. K., Jones, S. C., Magee, C. A., & Caputi, P. (2014). Family-focused autism spectrum disorder research: A review of the utility of family systems approaches. *Autism: The International Journal of Research and Practice*, 18(3), 213–222.
- Cridland, E. K., Jones, S. C., Stoyles, G., Caputi, P., & Magee, C. A. (2016). Families Living With Autism Spectrum Disorder: Roles and Responsibilities of Adolescent Sisters. *Focus on Autism and Other Developmental Disabilities*, 31(3), 196–207.
- Durrani, Huma (2014). Facilitating attachment in children with autism through art therapy: A case study. *Journal of Psychotherapy Integration*, 24(2), 99–108.
- Emery, M. J. (2004). Art therapy as an intervention for autism. *Art Therapy*, 21(3), 143–147.
- Hastings, R. P., Petalas, M. A., Jones, L., & Totsika, V. (2014). Systems analysis of associations over time between maternal and sibling well-being and behavioral and emotional problems of children with autism. *Research in Autism Spectrum Disorders*, 8(11), 1516–1520.
- Kang, S.-J., Kim, H.-S., Baek, K.-H. (2021). Effects of Nature-Based Group Art Therapy Programs on Stress, Self-Esteem and Changes in Electroencephalogram (EEG) in Non-

- Disabled Siblings of Children with Disabilities. *International Journal of Environmental Research and Public Health*, 18(11), 5912.
- Kerr, C., Hoshino, J., & Sutherland, J. (2007). *Family art therapy: Foundations of theory and practice*.
- Laghi, F., Lonigro, A., Pallini, S., Bechini, A., Gradilone, A., Marziano, G., & Baiocco, R. (2018). Sibling Relationships and Family Functioning in Siblings of Early Adolescents, Adolescents and Young Adults with Autism Spectrum Disorder. *Journal of Child & Family Studies*, 27(3), 793–801.
- Murray Law, B. (2020). Strengthening Families by Involving Siblings in Autism Treatment: Including siblings in autism intervention may reduce stress and fortify not just siblings, but the fabric of the whole family. *ASHA Leader*, 25(3), 48–58.
- Nuttall, A. K., Coberly, B., & Diesel, S. J. (2018). Childhood Caregiving Roles, Perceptions of Benefits, and Future Caregiving Intentions Among Typically Developing Adult Siblings of Individuals with Autism Spectrum Disorder. *Journal of Autism & Developmental Disorders*, 48(4), 1199–1209.
- Raghuraman, R. S. (2002). Art as a cathartic tool for siblings of children with a hearing loss. *American Journal of Art Therapy*, 40(3), 203–209.
- Rodrigue, J. R., Geffken, G. R., & Morgan, S. B. (1993). Perceived competence and behavioral adjustment of siblings of children with autism. *Journal of Autism and Developmental Disorders*, 23(4), 665–674.
- Saxena, M., & Adamsons, K. (2013). Siblings of Individuals With Disabilities: Reframing the Literature Through a Bioecological Lens. *Journal of Family Theory & Review*, 5(4), 300–316.

- Seligman, M., & Darling, R. B. (2007). *Ordinary families, special children : a systems approach to childhood disability* (3rd ed.). Guilford Press.
- Stoneman, Z. (2001). Supporting positive sibling relationships during childhood. *Mental Retardation & Developmental Disabilities Research Reviews*, 7(2), 134–142.
- Tomeny, T., Barry, T., Fair, E., & Riley, R. (2017). Parentification of Adult Siblings of Individuals with Autism Spectrum Disorder. *Journal of Child & Family Studies*, 26(4), 1056–1067.
- Wallace, J., Packman, W., Huffman, L., Horn, B., Cowan, M., Amylon, M., Kahn, C., Cordova, M., & Moses, J. (2014). Psychosocial Changes Associated With Participation in Art Therapy Interventions for Siblings of Pediatric Hematopoietic Stem Cell Transplant Patients. *Art Therapy: Journal of the American Art Therapy Association*, 31(1), 4–11.
- Wright, B. M., & Benigno, J. P. (2019). Autism Spectrum Disorder and Sibling Relationships: Exploring Implications for Intervention Using a Family Systems Framework. *American Journal of Speech-Language Pathology*, 28(2), 759–767.

THESIS APPROVAL FORM

Lesley University
Graduate School of Arts & Social Sciences
Expressive Therapies Division
Master of Arts in Clinical Mental Health Counseling: Art Therapy, MA

Student's Name: Corinne Kelly

Type of Project: Thesis

Title: Siblings of Autism Spectrum Disorder and Art Therapy

Date of Graduation: May 2022

In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

Thesis Advisor: Carla Velazquez-Garcia