



January 2012

# Selective Mutism And Art Therapies

Dalene Erickson

Follow this and additional works at: <https://commons.und.edu/theses>

---

## Recommended Citation

Erickson, Dalene, "Selective Mutism And Art Therapies" (2012). *Theses and Dissertations*. 1283.  
<https://commons.und.edu/theses/1283>

This Thesis is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact [zeinebyousif@library.und.edu](mailto:zeinebyousif@library.und.edu).

SELECTIVE MUTISM AND ART THERAPIES

by

Dalene Erickson

Bachelor of Science, Psychology, University of Washington, 1988  
Bachelor of Arts, English Literature, University of Washington, 1988

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Science

Grand Forks, North Dakota  
August, 2012

Copyright 2012 Dalene Erickson

This thesis, submitted by Dalene Erickson, in partial fulfillment of the requirements for the Degree of Master of Science, from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

---

Dr. Glenn Olsen, Chairperson

---

Dr. William Siders

---

Dr. Michael Gallo

This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the Graduate School at the University of North Dakota and is hereby approved.

---

Dr. Wayne Swisher, Dean of the Graduate School

---

Date

Title            Selective Mutism and Art Therapies  
Department    Early Childhood Education  
Degree         Master of Science in Early Childhood Education

In presenting this thesis in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my thesis work or, in her/his absence, by the Chairperson of the department or the dean of the Graduate School. It is understood that any copying or publication or other use of this thesis or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my thesis.

Dalene Erickson  
August, 2012

## TABLE OF CONTENTS

LIST OF FIGURES .....	vii
ACKNOWLEDGEMENTS.....	viii
ABSTRACT .....	ix
CHAPTERS	
I. INTRODUCTION.....	1
II. LITERATURE REVIEW .....	4
Definition, Characteristics and Traits in Children with Selective Mutism .....	4
Prevalence, Risk Factors and Etiology.....	10
Comorbidities.....	12
Treatment for Selective Mutism .....	15
Art, Anxiety and Selective Mutism.....	19
Statement of the Questions.....	20
III. METHODS .....	22
Survey .....	22
Participants .....	23
Survey Administration .....	23
Data and Data Analysis .....	24

IV.	RESULTS.....	26
V.	DISCUSSION AND CONCLUSIONS .....	37
	APPENDICE .....	42
	REFERENCES .....	47

## LIST OF FIGURES

Figure		Page
1.	Stone-faced.....	7
2.	Relaxed at home .....	7
3.	SM Questionnaire Responders .....	26
4.	What therapies have you tried? .....	27
5.	Types of classes in school .....	28
6.	Types of after-school classes .....	29
7.	Types of classes taken in the past.....	29
8.	How helpful were the art classes?.....	30
9.	How dance was rated .....	31
10.	How drama was rated .....	32
11.	How visual arts were rated .....	33
12.	How music was rated.....	34



## ACKNOWLEDGEMENTS

A heartfelt 'thank you' to Dr. Glenn Olsen, Dr. William Siders, and Dr. Michael Gallo for agreeing to be on my thesis committee, and for the guidance, support, and positive encouragement they provided at the University of North Dakota. Additional thanks to Janet Rex, distance librarian at University of North Dakota, who found articles for me while she was out of town.

## ABSTRACT

Selective Mutism (SM) is a social anxiety disorder characterized by a child's inability to speak in selected social situations, usually school. The causes of SM are multi-factorial. Affected children often have a history of anxiety, linguistic and motor disorders. Current therapies include a mix of anti-anxiety medication, behavioral modification therapy and anxiety reduction techniques.

Art therapy, (dance, drama and theater), has been shown to be beneficial in reducing anxiety and encouraging communication through forms other than speaking. Art therapy could be a valuable modality, benefitting children with SM.

I surveyed parents, teachers, former teachers of children with SM, and adults over the age of 18 who have or have had SM to investigate whether various art therapies had been helpful in the treatment of the disorder. Respondents consider cognitive behavioral therapy the most helpful therapy. Various art therapies were rated as moderately helpful for children with Selective Mutism.

## **CHAPTER I**

### **Introduction**

Evan (pseudonym) is a bright, articulate, loud girl who loves to play outdoors and take care of her family's pets. Her sense of humor is well-developed, and she often has her entire family laughing at her witticisms and physical characterizations of persons she knows. She is quite bossy and opinionated, and lets her family members know when she feels they have stepped out of bounds. However, in school Evan freezes up and says absolutely nothing, all day long. She can't tell the teacher when she has to go to the bathroom – so she doesn't always make it to the toilet. Evan will suffer through a 103 degree fever, unable to ask for help. Her classmates know she can speak, because she will speak to them on the playground. Her teachers wonder whether she can speak at all. At home, Evan explains to her mom, "I WANT to talk, but my throat is falling asleep and I can't talk."

Her parents are concerned about how she will be perceived in school by teachers and peers, and how she will navigate school, social situations, and independent living as she gets older. How can she get a driver's license, if she can't tell the person at the window what she wants? What kind of a life will she have, if she cannot express her wishes, desires, and needs?

Evan is my daughter, and she has Selective Mutism.

Selective Mutism (SM) is an anxiety disorder in children (Johnson & Wintgens, 2001; Shipon-Blum, 2001, Elizur & Perednik, 2003). Between .2 to .7 percent of the population is affected (McInnes, Fung, Manassis, Fiksenbaum & Tannock, 2004; Bergman, Piacentini & McCracken, 2002; Chavira, Stein, Bailey & Stein, 2004; and Elizur & Perednik, 2003). SM is characterized by a child's inability to speak in certain social situations, most often school. The child with SM is able to speak normally in other venues, most often at home. There is often a delay between onset and diagnosis and treatment of children with SM (Sharp, Sherman & Gross, 2006). Children with SM are quiet, and their lack of response is often attributed to shyness (Johnson & Wintgens, 2001). Children with SM control their anxiety through lack of expression, a type of stone-faced look, and not speaking – but may not act shy in all situations (Shipon-Blum, 2001). As the symptoms associated with SM do not manifest themselves in all situations, the child's anxiety may not be clear to the teacher. Teachers may also interpret the child's muteness as a reflection upon themselves, and hesitate to discuss the matter with parents. Parents, who hear their child speak normally at home, are unaware that their child is not speaking in school.

Children with SM are most often diagnosed before age five, or when he or she starts school (Sharkey & McNicholas, 2008; Chavira, Shipon-Blum, Hitchcock, Cohan & Stein, 2007; McInnes et al., 2004). Earlier diagnosis is beneficial, as SM usually interferes with educational achievement and social communication (Bergman et al., 2002; Dummit, Klein, Tancer, Asche & Martin, 1996). Children with SM often have

family members with SM, or with social phobia (Kristiansen & Torgerson, 2001; Black & Uhde, 1995; Steinhausen & Adamek, 1997).

Ten to fifty percent of children with SM have comorbid speech and language issues (Kristensen, 2000). Pragmatic, phonetic, receptive, and expressive language issues are most common. It can be difficult to diagnose and assess language disorders in children with SM, as their anxiety usually precludes their speaking to a therapist (Shipon-Blum, 2001). There is some evidence that children with SM may also have motor skills issues (Kristensen, 2002).

Studies show that treatment for SM is multimodal, and includes pharmacology, (usually fluoxetine), cognitive behavioral shaping, and anxiety reduction (Sharkey & McNicholas, 2008). Art therapy has been shown to be effective at both anxiety reduction and heightening self-esteem (Chambala, 2008; Ustinova, 2009). Additionally, art can often be regarded as a form of communication that allows feelings to be expressed, but doesn't require speech (Shipon-Blum, 2001). In casual conversation with parents of children with SM, I noticed that the parents discussed how important art classes were during treatment of the child with SM. I started to wonder whether art therapy was a valuable piece of the puzzle in treating children with SM. Would children with SM be more comfortable using art to self-express? Would participating in art classes lower anxiety and heighten self-esteem for children with SM? Would participating in art classes assist children along the road to comfortable verbal social communication?

## **CHAPTER II**

### **Literature Review**

#### **Definition, Characteristics and Traits in Children with Selective Mutism**

This paper is a Master's Thesis about whether various forms of art, such as dance, drama, and writing and drawing, can help children with Selective Mutism (SM). This paper includes a literature review covering the 1994 – 2012 time period.

Firstly, I will discuss the definition, characteristics, and traits of SM. Next, I will discuss the prevalence, risk factors, and etiology of SM. Thirdly, I present research on current treatments for SM. As SM is an anxiety disorder, and is symptomatic most frequently in the classroom, I will look at studies about children and anxiety, and whether art has been found to be helpful for anxiety reduction. I would like to find the answer to these questions:

- What therapy do parents, teachers, and persons over 18 who have, or have had SM, consider the most helpful for children with SM?
- Do parents, teachers, and persons over 18 who have had, or still have SM believe that studying art reduces anxiety and heightens self-esteem in children with SM?
- What are the experiences of children with SM in art classes? Is one form of art more enjoyable or more useful than another for children with SM?

- Do art classes or therapies allow children with SM to self-express when they are unable to do so verbally? If so, will the positive effects of art classes encourage children with SM to use more verbal social communication?

These questions are not addressed in the literature.

Because the literature does not answer these questions, I surveyed parents, teachers, and former teachers of children with SM, and adults over the age of 18 who have or have had SM. The final section of the paper will present my findings.

Selective Mutism is a social anxiety disorder characterized by a child's failure to speak in social situations, particularly at school. The child is able to speak normally in other situations. The inability to speak interferes with educational goals and social communication. The silence needs to last at least one month, and not just the first month of school. The child must understand the language of instruction. There is no other reason for the failure to speak, such as pervasive developmental disorder, schizophrenia, stuttering, etc. Onset is usually before age five, when the child begins attending preschool (Sharkey & McNicholas, 2008; Chavira et al., 2007; McInnes, et al., 2004).

Typical characteristics of children with SM include:

- Lack of expression or a stone-face (Shipon-Blum, 2001).
- A frozen look (Shipon-Blum, 2001).
- Jerky physical movements (SMG-CAN website).
- Inability to make eye contact (Johnson & Wintgens, 2001).

- Inability to speak, even when the child needs something, such as help opening a yogurt at lunch, or being allowed to go to the bathroom (Johnson & Wintgens, 2001).
- Low self-esteem (Shipon-Blum, 2001).
- Non-disruptive in the classroom (Standart & LeCouteur, 2003).
- Finally, anxiety is reduced by not attempting speech, hence children with SM do not look anxious (Johnson & Wintgens, 2001).

The behavior of children with SM is often attributed to extreme shyness (Black & Uhde, 1995; Kristensen, 2000). Because the children speak normally at home, parents are unaware of the problem at school. Teachers may not know the child well enough to realize this behavior is atypical. Children with SM do not act shy in all situations, because anxiety changes from setting to setting (Shipon-Blum, 2001). Due to all these traits, the disorder takes time to recognize and diagnose.

Selective Mutism is often mistaken for autism, mental retardation, oppositional defiance disorder (ODD), stubbornness or willfulness, rudeness, or a choice the child makes (Shipon-Blum, 2001). Children do not grow out of SM. It is an anxiety disorder that needs treatment (Johnson & Wintgens, 2001; Shipon-Blum, 2001, Elizur & Perednik, 2003).

The contrast between being relaxed and able to speak at home, and stone-faced and unable to speak at school, is illustrated in the following photographs of a child with SM (Figures 1 and 2).





*Figure 1.* Stone-faced.



*Figure 2.* Relaxed at home.

Bogels et al. (2010) conducted a literature review to make recommendations for the *Diagnostic and Statistical Manual, fifth edition (DSM-V)*. Bogels et al. propose

dropping Selective Mutism as a separate disorder, and instead categorizing it as a type of Social Anxiety Disorder (SAD) in young children, due to the similarities between SM and SAD definitions and treatments. Both SM and SAD are characterized by fears in social situations and lack thereof at home. Black and Uhde (1995) discovered a strong correlation between being diagnosed with SM and meeting the criteria for social phobia – 97% of subjects met both criteria. SAD and SM are both treated with fluoxetine, there is a great deal of comorbidity, and the psychological interventions used for SAD are also efficacious for SM. Bogels et al. explain that “SM has been proposed as an extreme symptom of children with SAD, rather than a stand-alone disorder....” (p. 178).

Norton, Cox, Hewitt & McLeod (1997) asked 95 university students to complete two social anxiety measures, and two personality scales. Norton et al. found that persons with social anxiety evaluate themselves and others less positively, and as more fearful in social situations.

Yeganeh, Beidel, Turner, Pima & Silverman (2003) investigated whether children with both SM and social phobia were more socially anxious than children with social phobia. Twenty-three children with both SM and social phobia were age matched with 23 children with social phobia alone. Researchers found that while clinicians rated children with SM as more anxious than children with only social phobia, children with SM did not self-report higher social anxiety than children with social phobia. There was no difference in self-rating of anxiety between the two groups. Yeganeh, Beidel & Turner (2006) interviewed 21 children with SM and social phobia, 21 children with social phobia only, and 21 normal controls. Participants were asked to complete a self-report

inventory; and their mothers were asked to complete a self-inventory as well. Yeganeh et al. (2006) found that children with SM do not consider themselves socially anxious, though clinicians do. If SM is a more extreme form of social phobia, then children with SM should rates themselves as more socially anxious than a child with only social phobia. This is not the case. Yeganeh et al. conclude that Selective Mutism is not necessarily a more extreme form of social anxiety, however, they feel more research is needed to correctly classify SM.

Unlike children with SAD, children with SM are also diagnosed with higher rates of language disorders and delays (McInnes, et al., 2004; Steinhausen & Juzi, 1996; Kristensen, 2002; Cohan et al., 2008). Manassis et al. (2003) compared 14 children with SM, and nine children with social phobia, who were of similar ages. Manassis et al. were searching for differences between children with SM and social phobia. Both groups of children, and their parents and teachers, were asked to complete an anxiety scale. Parents completed a questionnaire about SM, and the children were assessed cognitively, academically, and given a speech and language assessment. The group of children with SM demonstrated a higher percentage of language impairments than the group of children with just social phobia.

Children with SM have moderate issues with motor coordination (Kristensen, 2002). Shipon-Blum (2001) reports that a study in its early stages suggests that sensory processing disorder may be comorbid in children with SM.

Bergman et al. (2002) note that the onset of social phobia is usually age ten, while the onset of SM is commonly around age five. Sharp et al. (2007) suggest that SM is a precursor to social phobia because of the different ages at onset.

Persons with social phobia typically present with neither comorbid language disorders and delays nor motor control issues; children with SM often do. Persons with social phobia also self-report anxiety, while children with SM do not. This finding indicates that Selective Mutism and social phobia are distinct disorders. Shipon-Blum (2001) characterizes SM as a type of social communication anxiety. This is consistent with that fact that children with SM manifest their anxiety in certain social settings where they are expected to speak.

### **Prevalence, Risk Factors and Etiology**

Etiology of SM is not well understood (Kristensen, 2002; Nowakowski et al., 2009; Sharkey & McNicholas, 2008; Chavira et. al, 2007; Cohan, Price & Stein, 2006), but it does run in families, especially families with members who have anxiety disorders. Kristiansen & Torgerson (2001) gave 54 children with SM, and 108 matched controls personality and temperament tests, and interviewed both groups' parents and teachers. The parents of children with SM had more social anxiety, suggesting that SM does run in families. Steinhausen & Adamek (1997) interviewed 38 children with SM, and their mothers; and a control group of 31 children with an emotional disorder and a speech and language disorder. The family histories showed a higher incidence of taciturnity, or being reserved in conversations, in relatives of children with SM. In a study that included surveys and diagnostic interviews of the parents and teachers of 30 children

with SM, Black & Udhe (1995) found that 15% of parents and 19% of siblings had Selective Mutism, and 44% of parents and 21% of siblings had some type of social phobia.

Early behavioral inhibition may predispose children to anxiety disorders, leading to SM (Sharkey & McNicholas, 2008; Black & Uhde, 1995; Dummit et al., 1997; Steinhausen & Juzi, 1996). Shipon-Blum (2006) describes children with SM as having extremely inhibited temperaments. Cohan et al. (2006) propose that SM develops due to a genetic predisposition to anxiety, coupled with a communication disorder, which leads to SM.

Research shows that about .2 to .7 percent of children are affected (McInnes et al., 2004; Bergman et al., 2002; Chavira et al., 2004; Elizur & Perednik, 2003). Elizur & Perednik (2003) created four groups of mothers of children: ten mothers whose children had been diagnosed with SM and were born in Jerusalem; nine mothers of children with SM who had immigrated to Jerusalem; and two matched control groups. The researchers found that children of an immigrant, who also had a bilingual background are more likely to have SM. Girls seem to be affected more than boys (Johnson & Wintgens, 2001; Black & Uhde, 1995; Kristensen, 2000; Bergman et al., 2002; Elizur & Perednik, 2003). Some researchers have proposed that SM is precipitated by a trauma, such as sexual abuse, but this is not borne out by research (Black & Uhde, 1995; Dummit, et al., 1997).

## **Comorbidities**

Children with SM are ten to 50% are more likely to have other speech and language difficulties than other children (Kristensen, 2000). In a small study comparing seven children with SM, and seven children with social phobia, McInnes et al. (2004) found that the children with SM produced linguistically simpler and shorter narratives than their counterparts with social phobia. Children with SM also showed some deficits in syntactic language skills, producing fewer subordinate clauses. McInnes et al. conclude about children with SM, that “appropriate social and didactic interactions may limit their overall development of higher language skills....the potential academic and social outcomes of a combination of weak or subclinical language skills plus continuing functional impairment from chronic SM symptoms (including anxiety) may be more serious than those associated with weak language skills alone” (p. 311). Steinhausen & Juzi (1996) report that 38% of the children in their sample of 100 children with SM exhibited problems with expressive language, articulation, and stuttering.

Manassis et al. (2007), compared three groups: 44 children with SM, 28 children with anxiety disorder, and a control group of 19 normal children. They found that children with SM were more impaired linguistically, scoring significantly lower on standardized language tests. Children with SM also showed larger deficits in memory and greater social anxiety than children in the other two groups. The researchers hypothesize that children with SM may have difficulty recognizing face and visual social cues, and this may contribute to anxiety.

Kristensen & Oerbeck (2006) administered neuropsychological tests to 32 children with SM, and 62 matched control children. The children with SM were found to have deficits in auditory-verbal memory compared to the control group, supporting the association between language disability and SM. Contrary to Manassis et al. (2007), however, Kristensen & Oerbeck did not find differences in visual memory for children with SM.

In a larger study with 54 controls and 54 children with SM, Kristensen (2002), through parent interviews, copies of medical records, and motor skills tests, found that children with SM have moderate issues with motor coordination. He also found that children with SM often have minor physical abnormalities. He recommends that children with SM receive a motor skills assessment.

Nowakowski et al. (2009) compared academic abilities of 30 children with SM, 46 children with anxiety, and 27 community controls, using standardized tests, parent, and teacher ratings. Children with SM and children with anxiety had lower receptive vocabulary and mathematics scores. However, both groups of children still scored within the normal range expected at their age levels. Researchers note that academic levels of children with SM would need to be monitored over time. As concepts build on one another, children with SM may be afraid to ask questions and their academic attainment may not stay within the expected range relative to age.

Children with SM may also have elimination disorders. Kristensen (2000) interviewed parents of 54 children with SM, and 108 matched controls. He also asked children's teachers to fill out a questionnaire, compared medical reports, and examined

each of the children's language skills and motor function. He found that 30% of children with SM had either enuresis or encopresis, compared to only ten percent of control children. Black & Uhde (1995) found higher levels of enuresis in children with SM than in control groups, but note that the prevalence is not much higher than that found in normal children.

Children with SM may not be able to cope with hearing their own voices, due to auditory efferent issues, and so, become mute. Bar-Haim et al. (2004) compared the hearing of 16 children with SM, and 16 normal controls. The children with SM had reductions in auditory efferent activity (the brain's processing of one's own voice). As an aside, the researchers note that SM is sometimes treated with selective serotonin reuptake inhibitors (SSRIs), and that serotonin is involved in auditory processing. Henkin, Feinholz, Arie, & Bar-Haim (2010) recorded brain activity of ten children with SM and ten control children. In addition, clinical interviews were conducted, and parents and children were asked to complete questionnaires assessing the child's anxiety and speaking behaviors. Henkin et al. found evidence that children with SM may also have auditory efferent issues, and postulate that this may lead to the avoidance of speech children with SM exhibit.

Milham et al. (2005) compared brain scans of 17 pediatric patients with anxiety, and 34 control subjects. Neuroimaging techniques showed that the amygdala, which is involved in emotional responses, is smaller in children with anxiety disorders. Milham et al. point out that adults with major depression also have less gray matter in the amygdala, and suggest a relationship between pediatric anxiety and adult depression.



Additionally, the researchers point out that patients with anxiety often do have biological abnormalities and should be prescribed SSRIs. Milham et al. also urge clinicians to prescribe based on suffering and impairment, not just when doctors are aware of the biological abnormalities. Akimova, Lanzenberger & Kasper (2009) reviewed position emission tomography studies on patients with anxiety disorder, and healthy persons. They report reduced serotonin levels in patients with anxiety.

### **Treatment for Selective Mutism**

Selective Mutism is considered difficult to treat (Standart & LeCouteur, 2003), as symptoms manifest differently in different social situations, or may not manifest at all. A child may be able to speak on the playground and at home, but not in school (Steinhausen & Juzi, 1996). There is a delay between onset and diagnosis and treatment (Sharp et al., 2007). There are a number of reasons for this, including:

- Teachers mistake SM for shyness, and parents do not realize their child, who speaks at home, is not speaking in school.
- Clinicians cannot rely on observed symptoms, because symptoms manifest differently from setting to setting (Shipon-Blum, 2001, Vecchio & Kearney, 2009).
- Pediatricians may not be aware of treatment options, and thus, less likely to encourage treatment (Chavira et al., 2004).
- Teachers can become frustrated and feel inadequate as a child is unable to interact with the adult, and respond negatively to the child with SM, reinforcing symptoms (Johnson & Wintgens, 2001).

It is important to diagnose children with SM early because SM does not resolve without treatment, and impairs social functioning (Bergman et al., 2002; Dummit et al. 1996). Frustrated adults may choose the wrong response – punishing the child or insisting that the child speak. These reactions serve to worsen SM (Johnson & Wintgens, 2001; Shipon-Blum, 2001). More aggressive treatments are required as a child ages, and behaviors become entrenched (Standart & LeCouteur, 2003; Johnson & Wintgens, 2001). Also, educators and clinical professionals need to be trained to recognize the signs of SM, in order to facilitate earlier diagnosis and treatment for the child with SM.

Children with SM have decreased opportunities to practice social skills. Lack of social interaction creates a vicious cycle where a child's poor social skills preclude positive social interactions (Cunningham, McHolm & Boyle, 2006). Lack of speaking experience leads to an expressive language delay (Klein & Armstrong, 2012).

Children with SM are often impaired linguistically and it is in the child's best interests for therapists, parents and teachers to find a way to test and treat the child for language deficiencies, in addition to treatment for SM (Keen, Fonseca & Wintgens, 2008; Cohan et al., 2006). Pragmatic, phonetic, receptive and expressive language issues are most common, but difficult to diagnose and assess, as children with SM usually won't speak to therapists due to anxiety. Kristensen (2002) recommends children have their motor skills evaluated.

Anxiety levels in children with SM can create inaccurate test results. Children may be slower to respond to directions, or fail to answer. They may look away and

ignore the tester, causing the tester to misinterpret the child's understanding or knowledge. It is very difficult for children with SM to initiate verbal and sometimes non-verbal responses (Shipon-Blum, 2001).

Shipon-Blum (2001) recommends that a familiar person administer tests, such as a parent. The setting should be in the child's own home, or other familiar place. Group evaluations are not recommended. Additional time and frequent breaks are important during testing for the child with SM.

Parents, teachers, and treatment professionals must work as a team when treating a child with SM (Shipon-Blum, 2001; Johnson & Wintgens, 2001, Vecchio & Kearney, 2009, Cohan et al., 2006). The treatment goals for a child with SM include decreasing anxiety, increasing social interactions, and finally, increasing verbal communication (Dow, Sonies, Scheib, Moss & Leonard, 1995; Shipon-Blum, 2012). Pharmacology has been shown to reduce anxiety. Dummit et al. (1996) conducted a nine-week trial of fluoxetine with 21 children who were diagnosed with anxiety disorders. Improvement was stronger in younger children, and 76% of participants improved. However, for children with SM, pharmacology alone is not enough, and treatments need to be in conjunction with one another. Currently, a multi-modal approach involving behavioral modification, which includes the positive reinforcement of any communication at all, stimulus fading, shaping and modeling, and positive reinforcement; anxiety reduction; and pharmacology (fluoxetine) is recommended as a treatment plan for children with SM (Keen et al., 2008; Dow et al., 1995). It is important to include therapy for any comorbid disorders (Cohan et al., 2006). Family participation

and school involvement are essential, to reinforce and encourage the desired behaviors and healthy coping skills from the child with SM.

Shipon-Blum (2012) has created a program called S-CAT. She created the Social Communication Bridge, a tool for children to view their progress through four stages: noncommunicative, nonverbal, transitional (often using a verbal intermediary or augmentive device), and verbal. Shipon-Blum teaches children to lower their anxiety and increase social confidence and self-esteem, through having children with SM practice social interactions, learn appropriate social cues, and teach themselves to recognize that familiar situations and persons do not always create extreme anxiety. She creates games out of social interactions – such as ordering from a waiter at a restaurant, buying food at the store, and interviewing persons with whom children with SM interact with regularly. Children are asked to rate their anxiety after playing one of the games, and learn to more accurately and appropriately assess their anxiety levels. Play-dates are an important component of S-Cat, as are positive reinforcement and goal-setting.

A recent study by Oon (2010) used drama therapy, which Oon differentiates from play by informing the reader that drama therapy focuses on dramatic play and behavioral skill shaping. The sole subject also developed heightened self-esteem through these therapies. Oon's study invites questions about the effects of different types of art, including drama and dance, on children with SM. There do not appear to be studies on this question in the literature. Do art classes reduce anxiety and heighten self-esteem in children with SM? If so, what type of art class is most helpful? Do art

classes allow children with SM to express themselves when they are unable to verbalize?

### **Art, Anxiety and Selective Mutism**

Cambourne (1995) postulates that conditions of learning include freedom from anxiety. Various forms of art have been shown to reduce anxiety, encourage self-expression, and raise self-esteem. Curl (2008) divided 40 university students into one of four groups: a negative-focus drawing session, a positive-focus drawing session, a negative-focus collage session, or a positive-focus collage session. Participants completed a pre- and post-condition questionnaire, and their heart rates were measured. She found that art therapy, with a positive focus, reduces stress levels. Chambala (2008) says, "Art therapy is appropriate for people suffering from anxiety disorders for several reasons. First, expressing oneself by creating form, color, and design is often more beneficial than solely relying on words for self-expression and communication" (p. 187). She conducted seven eight-week sessions of art therapy with client groups of four to eight. Each week's session would focus on a different aspect of anxiety. Chambala notes that clients were able to leave the sessions with tangible reminders of their coping skills. Johnson (2007) posits that aesthetic arts, including storytelling, poetry and visual arts are "integral to language and literacy learning" (p. 311). McNamee (2006) says that "(art therapy) has been used as a modality for language impaired populations and for children who are often more comfortable with right brain activities than language" (p. 7). She studied the results of bilateral artwork in a population of twelve young adults from a family therapy center, and concluded that the

subjects were better able to function post bilateral art sessions. Ustinova (2009) looked at dance movement therapy and notes that those in the group who danced demonstrated higher scores of “self-feeling and mood.”

Shipon-Blum (2001) notes that, for children with SM, creating art and playing an instrument can be both relaxing and create a conversation piece. Art can boost self-esteem, and is another way for a child with SM to communicate.

### **Statement of the Questions**

What is the most helpful therapy for children with Selective Mutism? Cognitive behavior therapy is one of the current therapies for children with SM. Treadwell, Kumar & Wright (2002) concluded in their study of college students and patients diagnosed with anxiety and other disorders, that cognitive behavioral therapy combined with drama therapy was effective. Anari, Ddadsetan & Sedghpour (2009) studied two schools in Tehran. A group of 32 children with social anxiety were given drama therapy for six weeks, and afterwards, reported a decrease in symptoms. Oon’s (2010) study presented a case of a child who, through drama, was able to overcome her Selective Mutism.

The learning difficulties often experienced by children with SM could be exacerbated by their extreme anxiety. If art therapies can help children with SM feel less anxious, children with SM would experience more positive learning experiences. There are no studies specifically about Selective Mutism and art, though there are studies showing that art therapies reduce anxiety. Do parents, teachers, and persons over 18 who have had, or still have SM believe that studying art reduces anxiety and

heightens self-esteem in children with SM? What are the experiences of children with SM in art classes? Is one form of art more enjoyable or more useful than another for children with SM? Do art classes or therapies allow children with SM to self-express when they are unable to do so verbally? If so, will the positive effects of art classes encourage children with SM to use more verbal social communication?

## **CHAPTER III**

### **Methods**

To test the hypothesis that the arts could be an effective tool in treating SM, survey research, rather than personal interviews, was chosen since the incidence of SM in the general population is relatively rare. Survey research allowed me to reach persons from long distances away, whom I could not have interviewed without great expense. Reaching persons from many different areas, including persons from other countries, increased my sample size, and improved reliability of the survey.

#### **Survey**

The survey (Appendix A) was designed to answer the following research questions: What treatments did respondents find most helpful for children with SM? Were art classes considered helpful? If so, which art classes were best for children with SM? The survey was constructed for face validity – I asked the questions to which I wanted answers. It included both fixed answer and open-ended questions. This research project is a mixed methods research design, both quantitative and qualitative. Results were analyzed using mean, median, and mode; and/or common themes among the data were identified.

Before the survey was administered the questionnaire was reviewed by persons from diverse backgrounds, including education students at the University of North



Dakota. The survey was also tested by adults who take ballroom dance lessons, as I am also a ballroom dance instructor. None of the respondents to the survey participated in the review before it was administered. The Institutional Review Board (IRB) at the University of North Dakota also reviewed the survey, and gave approval.

The survey began with a statement of purpose and a requirement that respondents be 18 or over. If the survey respondents chose to continue and answer the questions, the respondent was regarded as having given informed consent.

### **Participants**

With a request that respondents be at least 18 years of age, parents, teachers, and former teachers of children with SM, were recruited to fill out the survey. Adults over the age of 18 who have, or have had SM, were also encouraged to complete the survey. Parents, teachers, and adult children who have or have had SM are in a position to recognize whether or not certain therapies help the child with SM, as children with SM will often speak only to their parents and persons they are extremely comfortable with. Thus, parents have a communication channel that is not open to most others, including therapists. Teachers are in classrooms where symptoms of SM most often manifest and can observe the effects of therapies. Adults who have or have had SM are also in a unique position of being able to look back and assess what techniques helped and which did not.

### **Survey Administration**

The survey was posted on SurveyMonkey (Surveymonkey.com). Because Selective Mutism is not widespread, steps were taken to ensure an adequate number of

respondents. Messages were left on Facebook for groups that had to do with SM (Selective Mutism Group, with 441 members, and Parents of Children with Selective Mutism, with 306 members). Others, known to fit the parameters of my survey, were contacted, and asked to fill out the survey. The survey was also posted on German Facebook SM groups, informing peoples of the opportunity to fill out the survey. In an effort to get the survey out to persons, retain anonymity, and keep costs low, the [www.dushor.com](http://www.dushor.com) website was used as a portal to access the survey on Survey Monkey. Dushor Dance Studio is a ballroom dance studio in the District of Columbia metropolitan area. I own the website, thus, posting the link there was my least expensive option.

### **Data and Data Analysis**

Respondents to the survey came from any of the groups above, and the survey structure did not allow me to identify individual respondents or respondents by group. It is likely that members of one group are also members of another group that I contacted. Respondents to the survey were able to fill it out anonymously. Respondents did have an opportunity to leave contact information, if they wished. My committee members and I will be the only ones able to see the completed questionnaires. Only summary statistics, published in this thesis, are available to others.

Completed questionnaires will be kept in a separate locked location (the locked office of DuShor dance studios), in a locked metal box, for three years following the completion of the study, at which time the data will be shredded and then burned. There are no separate consent forms.

Quantitative data analysis included calculations to describe respondents and their responses. Qualitative data analysis included looking for categories of responses and grouping those categories into themes.

## CHAPTER IV

### Results

The survey was posted for nine weeks, and 55 persons responded. Respondents were able to select which questions they answered, so not every question received 55 responses. Because going to the dushor.com website may have lead to a bias for “ballroom” being given as an answer to Question 9, this question was discarded in my data analysis. The majority of responders to the survey were parents (61%). Twenty-eight percent were adults over the age of 18, who have, or have had SM. Current and former teachers made up the smallest groups, of 9% and 2%, respectively. See Figure 3.

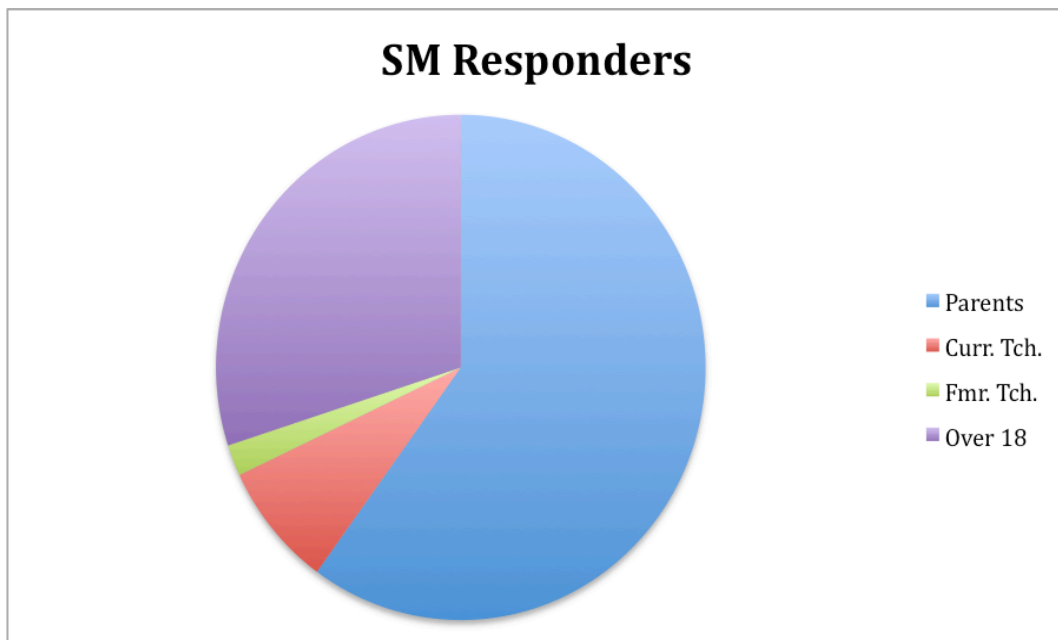


Figure 3. SM Questionnaire Responders.

The mean age at diagnosis was six years; the median and the mode were both five years of age at diagnosis.

Ten responders skipped the question “What therapies, specifically for Selective Mutism, have you/your child tried?” Thirty-one percent selected anti-anxiety medication; 46.3% behavior therapy/modification; 53.7% play therapy; and 34.1% chose anxiety reduction techniques. See Figure 4.

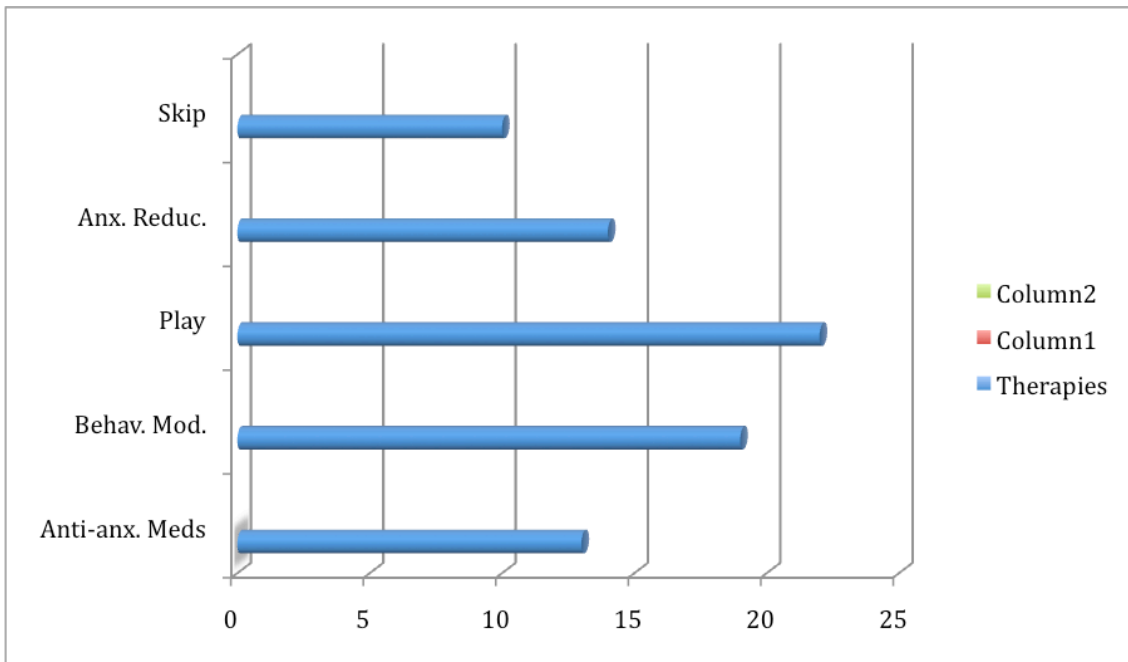


Figure 4. What therapies have you tried?

Of the twenty responders to question four, asking for descriptions of cognitive behavior therapy and/or anxiety reduction, the most common answers described desensitization, fade-in/fade-out techniques, and seeing a psychologist.

“1-2-1 therapy with a psychologist working on ways to reduce my anxiety through helping me to understand my anxieties, how they occur/are increased and working on ways to reduce them. Including helping others

understand my difficulties and how they can help reduce my anxiety” (Survey Monkey).

“We carefully broke down the tiny steps needed to progress. She would agree to trying the next step. If she tried, she was rewarded on a sticker chart that lead to small and large rewards. If she didn't try, that was OK. She could always try another day. There had to be no pressure. Anxiety reduction was a process of desensitization to her fears that accompanied her mutism. She had a fear of public restrooms and eating in public.” (Survey Monkey).

The median grade of the survey participants, (parents answered for minors), was second grade. However, there were more children in kindergarten than any other grade.

The majority of children with SM participated in music classes in school. The next highest was visual arts classes, followed by drama and dance. See Figure 5.

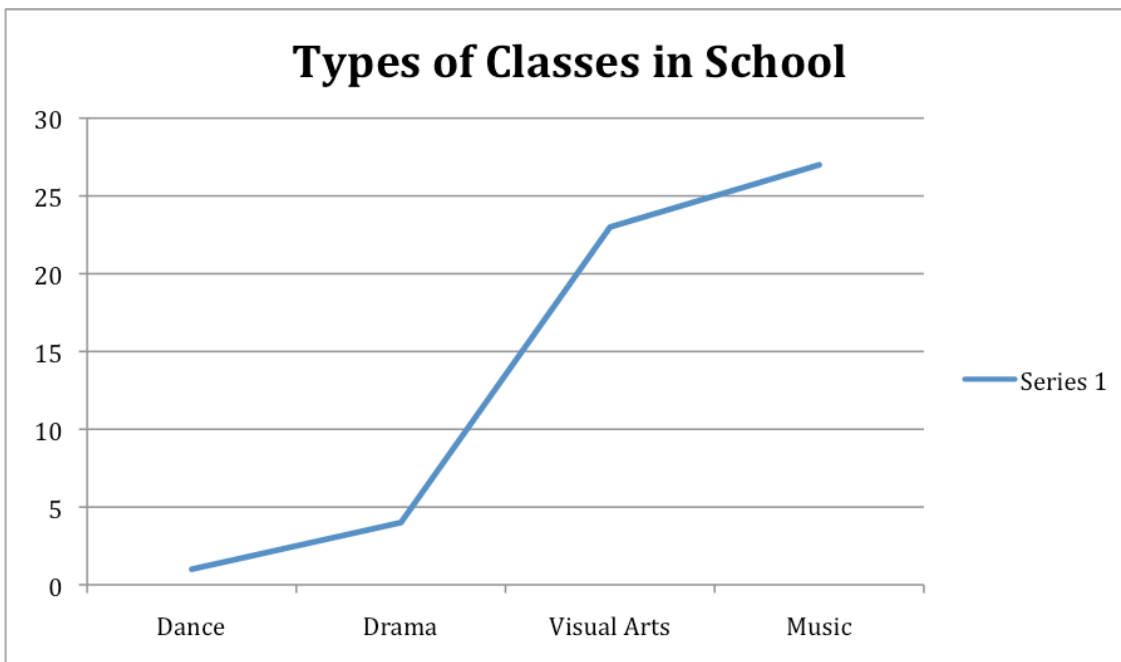


Figure 5. Types of classes in school.

Some children participated in after-school classes. The majority of these participated in after-school dance classes, with some in music and visual arts classes also. No respondent (nor respondent's child) participated in an after-school drama class, as depicted in Figure 6.

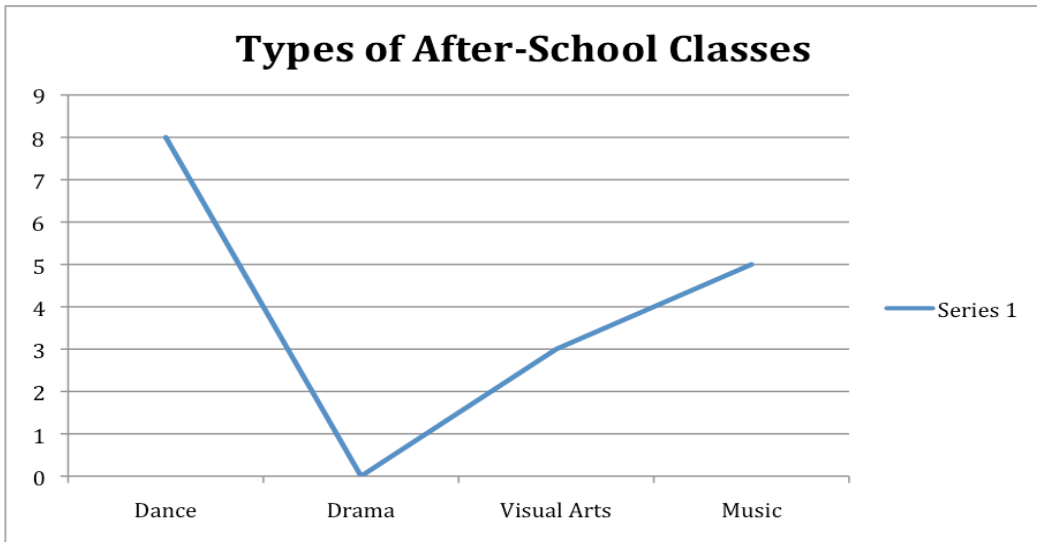


Figure 6. Types of after-school classes.

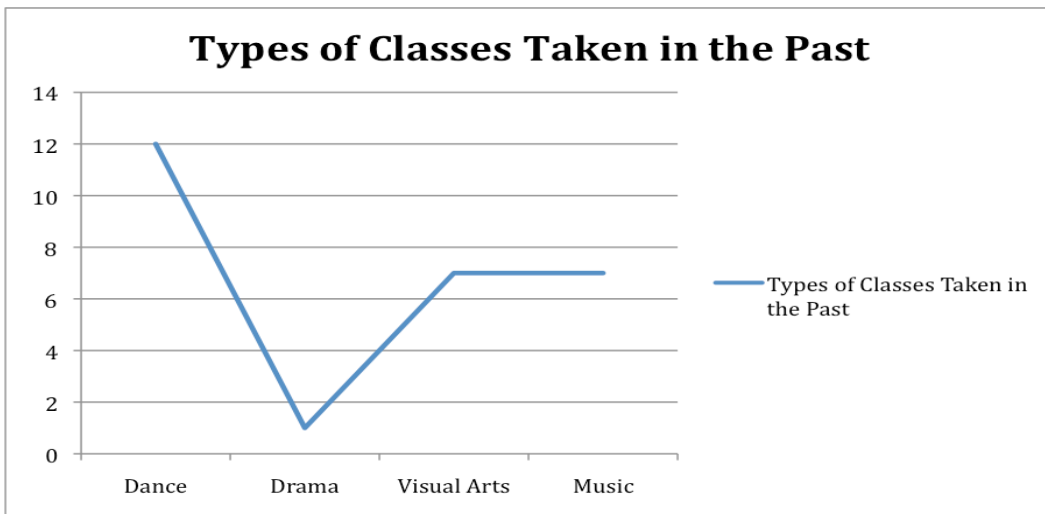


Figure 7. Types of classes taken in the past.

Dance classes comprise the majority of the arts classes taken in the past, but not currently taking. Visual arts and music ranked equal, with drama classes least likely to have been taken by a child with SM. Of the persons who responded to what type of dance classes they or their child took, six of 12 took ballet, with the rest taking jazz, tap, Irish, ballroom and “music and movement.” See Figure 7 above.

On a scale of one to five, with one being least helpful, and five being most helpful, parents and persons over the age of 18 who have, or have had SM, rated visual arts classes as being the most helpful, followed by music class, dance class, and drama class. See Figure 8.

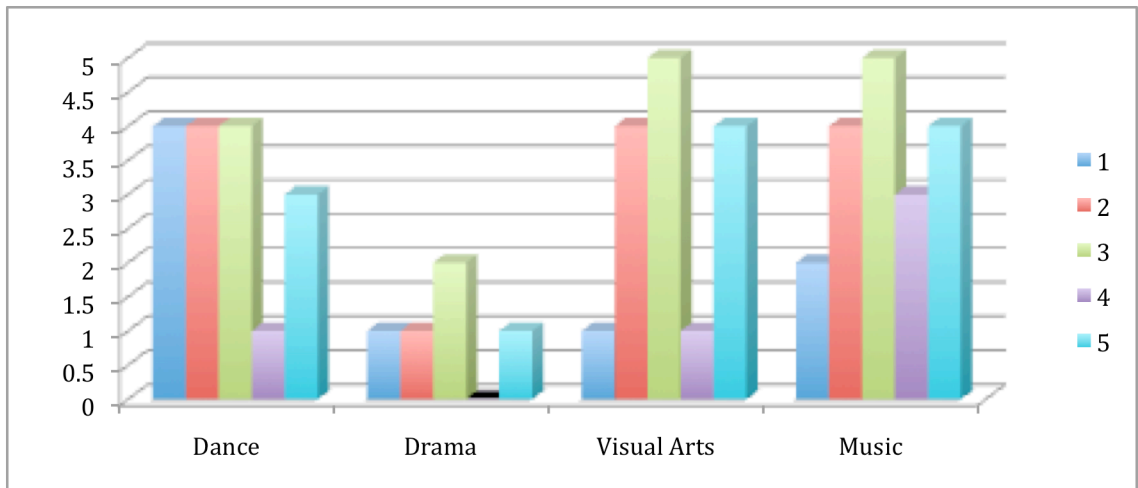


Figure 8. How helpful were the art classes?



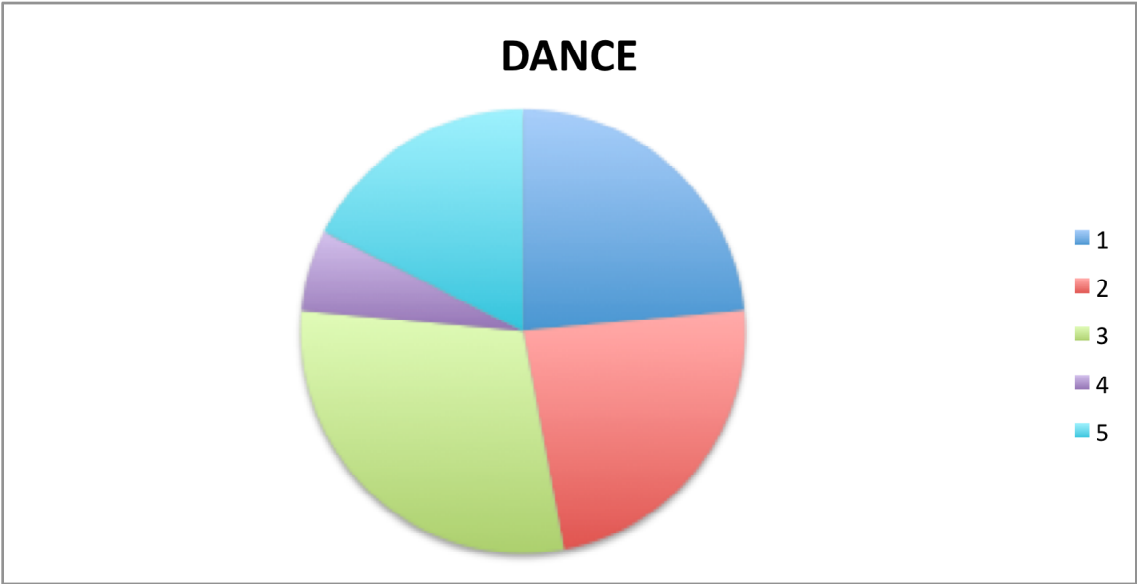


Figure 9. How dance was rated.

Dance received 17 ratings in all. Four persons (23.5%) felt that dance was least helpful, and rated it a "1," and the same number rated it a "2." Five persons indicated that dance was moderately helpful, giving it a "3" (29.4%). One person rated dance as a "4" (5.9%) and three persons rated dance as extremely helpful, giving it a "5" (17.6%).

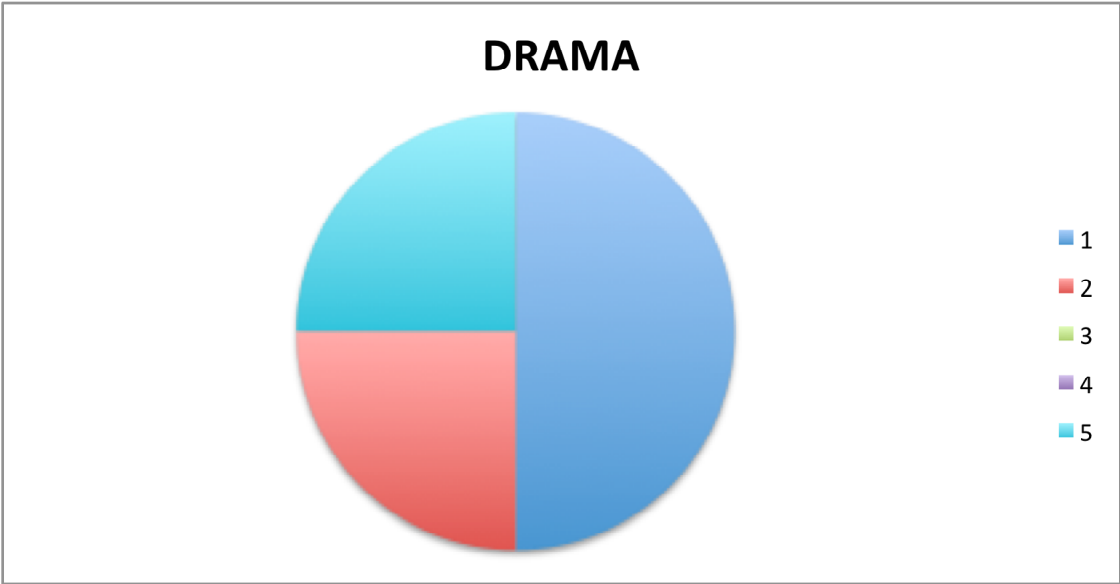


Figure 10. How drama was rated.

Fifty percent, or 2, respondents rated drama as least helpful. One person gave drama a “2” (25%), and one person gave drama a “5” (25%). Four persons total selected drama as having been helpful for themselves or their child with SM.

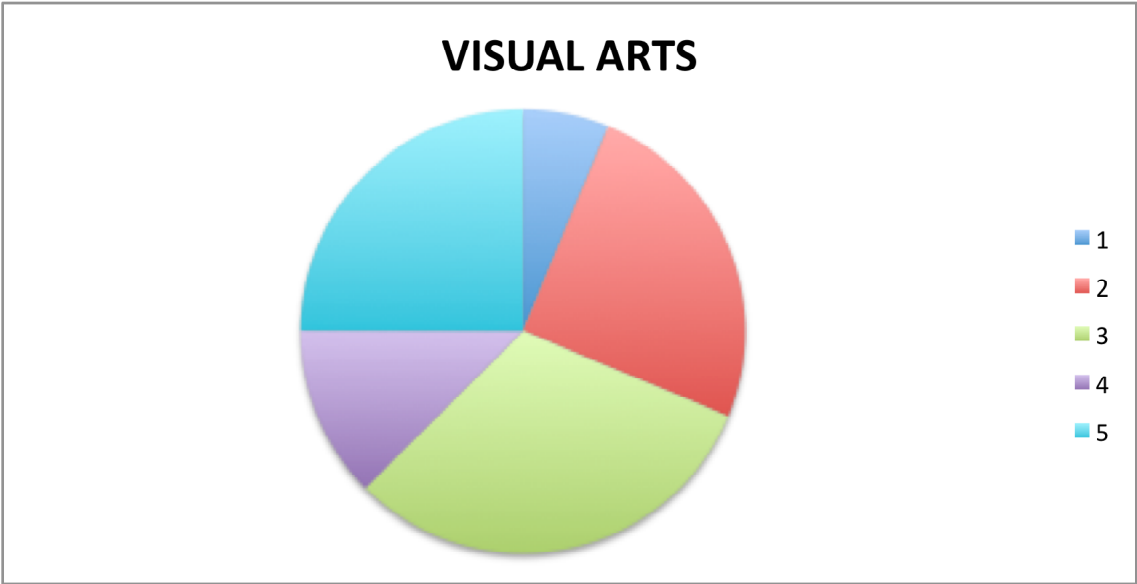
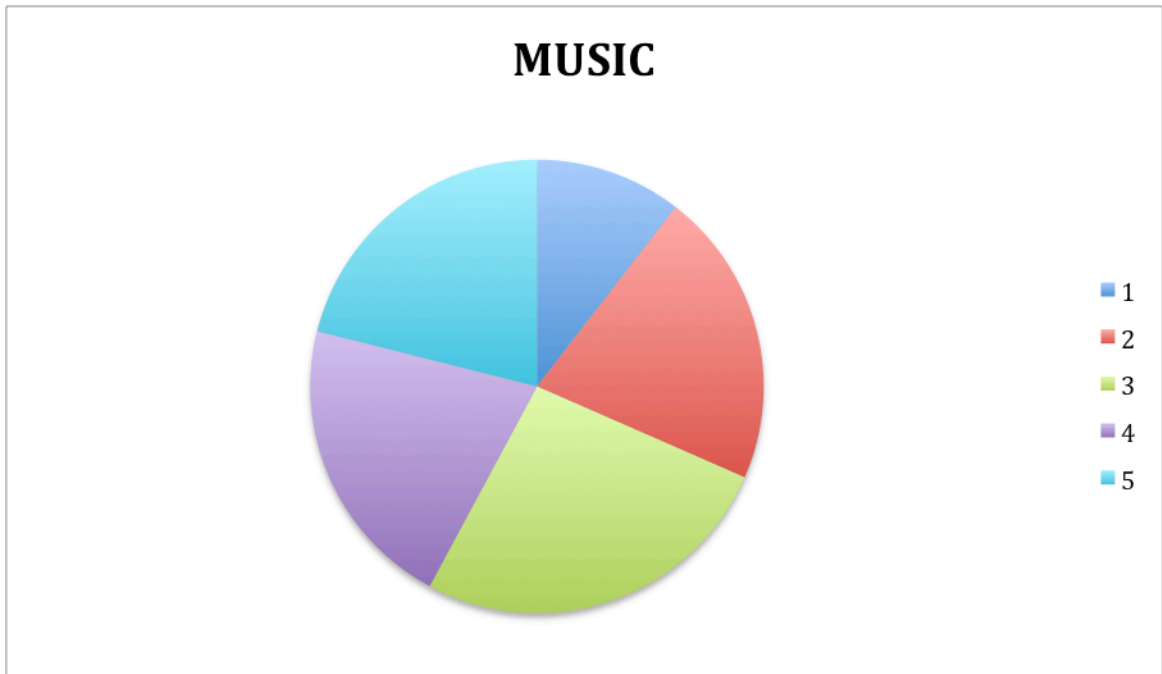


Figure 11. How visual arts were rated.

Sixteen persons chose visual arts as having been helpful to their child with SM. One (6.3%) selected “1” – least helpful; four (25%) chose “2;” five persons (31.3%) chose “3” - moderately helpful; 12.5%, or 2 persons, chose “4”; and four persons (25%), chose “5” – most helpful.



*Figure 12.* How music was rated.

Nineteen persons in all chose music as having been helpful for children with SM. Two (10.5%) chose “1” – least helpful; four (21.1%) rated music as a “2;” five (26.3%) gave music a “3” – moderately helpful; four (21.1%) gave music a “4;” and four persons (21.1%) also rated music as a “5” – the most helpful.

The persons who responded to the question “please feel free to add any comments about the classes you/your child have taken” said “she felt like it put her too much on stage,” “she loved dance but wilted under the pressure of the performance aspect of it,” “He does enjoy individual piano lessons, but we don’t make him participate in the recital.” Participation versus performance is an interesting point about three of the four modes.

Of the 24 answerers of “do you attend classes with your child?” 13 answered “yes,” and 11 answered “no.”

Thirty-six persons answered “what do you think is, or has been, the most helpful therapy/combination of therapies for you/ your child?” Answers ranged from “none,” “no one seems to no (sic) about it,” “have not found anyone in Colorado to help us” (six persons); to describing cognitive behavioral techniques, combined with medication (12 persons). Five respondents described music and art as helpful, with one writing, “As an adult, I am currently dealing with the effects of untreated SM. Dance and music has been incredibly important to me, not only as a child, but as an adult also.” Ten persons felt that play therapy and talking had been the most helpful, and one lone respondent felt that working with animals had made a difference.

Several themes became clear. The first theme is that, as the literature states, parents, teachers, and persons over the age of 18 who have or have had SM report that cognitive behavioral therapy, with fade-in, fade-out techniques and desensitization are the most helpful therapies for children with SM. Respondents also report that creating a no-pressure situation and reducing anxiety are also very important.

A second theme emerged: the difficulty finding an effective therapist to treat the child with SM. The literature emphasizes that early detection and treatment serves to lessen the probability that the behaviors of the child with SM – such as inability to speak - before they become ingrained (Johnson & Wintgens, 2001). When parents have a difficult time finding effective therapies and therapists, and children with SM go untreated, symptoms become more severe even if detection is early.

A third theme is that children were more likely to attend music and visual arts classes in school, and more likely to attend dance classes outside of school. Visual arts and music classes were also rated as more helpful than dance and drama classes.

A fourth theme was related to art classes. Respondents felt that art classes were moderately helpful, probably as an adjunct to cognitive behavioral therapy. However, the performance pieces, such as recitals, would cause children with SM to discontinue their previously enjoyed activity.

The final theme I notice was that, although 31% of respondents or their children tried medication, such as fluoxetine, only four of 40 respondents said that medication was helpful. This is only ten percent of the subject population.

## CHAPTER V

### Discussion and Conclusions

The questions the research was designed to answer included: Do parents, teachers, and persons over 18 who have had, or still have SM believe that studying art reduces anxiety and heightens self-esteem in children with SM? What are the experiences of children with SM in art classes? Is one form of art more enjoyable or more useful than another for children with SM? Do art classes or therapies allow children with SM to self-express when they are unable to do so verbally? If so, will the positive effects of art classes encourage children with SM to use more verbal social communication? Should art therapies be added to the roster of therapies for children with SM? Parents and persons who have or have had SM are a valuable resource, as they are on the “front lines” of dealing with the effects of SM.

The majority of the 55 survey respondents were parents of children with SM (61%). Slightly over half of them attended arts classes with their child. Average age of child with SM whose parent or teacher responded, was 6 years, which is slightly higher than average in the literature. This could be related to the different ages that children start school in various countries (one respondent wrote “hello from Switzerland”).

Behavioral modification therapy was rated by parents, teachers, and persons over the age of 18 who have had, or have SM, as the most helpful therapy for children

with SM. The literature recommends behavioral modification therapy, anxiety reduction, and medication (Keen, Fonseca & Wintgens, 2008; Vecchio & Kearney, 2009). The literature touts medication as a useful therapy for children with SM (Dummit, 1996; Kumpulainen, 2002), and yet, while 31% of respondents said that they or their child with SM had tried some type of medication, only ten percent felt it was helpful. This is a significantly different finding from other studies, and is interesting. Clinicians may see medication as providing relief and help for children with SM, while parents and children themselves do not. This finding deserves further investigation.

Children were more likely to attend music and visual arts classes in school, and more likely to attend dance classes outside of school. Respondents rated music and visual arts classes as more helpful than dance and drama classes. Music and art classes are more likely than dance or drama classes to be offered at school. School is often where the inability to speak manifests itself in children with SM, and so music and art classes serve to reduce anxiety at school in children with SM. Therefore, the music and art classes, since they are held at school, are more helpful than dance and drama classes. Additionally, most drama classes involve speaking, and this may deter children with SM from participating. This finding differs from Oon's (2010) result, that a child with SM was helped through drama therapy. This difference could be a result of Oon's sample size of one subject. Treatment of SM is not a "one-size fits all" protocol, and Oon's subject may have reacted differently to drama than the children in this survey. A



possible project for the future would be to explore whether or not art therapy was a useful adjunct to behavioral therapy for treatment of children with SM.

Fewer respondents indicated that dance classes were helpful for children with SM. Kristiansen (2002) indicates that children with SM are more likely to have motor skills issues. Perhaps, due to this, children with SM avoid dance movement classes, on average. It would be interesting to measure the motor skills of a control group of children with SM, and second group of children with SM, who are matched for age and motor skills ability with the first group. The second group of children would take dance classes. A post-dance class motor measurement would be taken for both groups of children, and compared.

This survey was not structured to ascertain whether parents felt classes were more helpful if parent and child attended together. However, when parents attended arts classes with their children, the classes may have served as a way to model appropriate social behavior, and desensitize the child with SM to novel situations and new persons. In the future, gathering more information about young children with SM who attend arts classes with their parents, would be interesting. Do the classes provide an opportunity for children with SM to be taught about positive social interactions? Another possibility would be that having parent and child attend classes together would foster a dependence of the child with SM upon the parent, and impede progress rather than encourage progress.

A recurring comment was that, while children liked the arts classes, at performance time, they were not able to perform in front of an audience. This finding

provides an opportunity for parents and teachers to realize that the benefits of arts classes may become a negative at performance time, and to allow the child to continue with the activity, and yet skip the performance aspect. This would allow the child with SM to enjoy an arts class, and keep anxiety low.

Another interesting idea to help alleviate anxiety for children with SM was the response that animal therapy was helpful. This would be an interesting idea to further research for children with SM.

Additionally, I would like to see would be a study of two groups of children with SM. The first group would use cognitive behavioral therapy; and the second use cognitive behavioral therapy and a type of art therapy. If this comparison was favorable towards art therapy in conjunction with cognitive behavioral therapy, then it would be interesting to compare the various types of art therapy. I predict that visual arts would come out strongest, because of the lack of performing element, and because it most often occurs in schools.

I was also saddened to see the number of responses indicating frustration and lack of help and understanding from therapists and other professionals:

“Unfortunately, my SM was never officially diagnosed and I did not benefit from therapy as a child.”

“My five year old's teachers were really rough and punishing him. Finally his psychologist appeared at an SAT meeting and explained the diagnosis and they now are working for him instead of against him. Tough school year for him though!!” “so far nothing has helped her.”

Limitations of the survey include my inability to reach every possible person who fit the response criteria, language barriers (in the case of the European respondents), and the possibility of faulty recall from respondents. Respondents may not choose to give specific, clear information when asked to describe events, behaviors, or therapies. In an effort to get the survey out to persons, retain anonymity, and keep costs low, the survey was also posted on the [www.dushor.com](http://www.dushor.com) website, a ballroom dance studio in the District of Columbia metropolitan area. Since I own that website already, posting the link there was my least expensive option. However, question number nine was discarded, due to persons writing “ballroom?” as an answer, perhaps influenced by the survey portal being on a ballroom dance website.

Significant findings include that while clinicians see pharmacology as a useful adjunct to cognitive behavioral therapy for children with SM, parents and adult children with SM do not agree. Do parents understand how to give the medication accurately? Are the side effects so disturbing that children refuse to take the medication? Further research is indicated. Art classes, particularly those taught in school, such as music and visual arts, are considered a helpful adjunct to cognitive behavioral therapy by parents, teachers, and adult children who have or have had SM. Appropriate treatments for Selective Mutism need to be published and disseminated world-wide, so that children with SM can navigate their world with ease and confidence.

## **APPENDICE**

## APPENDIX A

### Copy of Survey

Survey of Parents and Teachers of Children with Selective Mutism, and adults (over age 18) who have had Selective Mutism

The purpose of this questionnaire is to ask parents, teachers and adults (over age 18) who have or have had Selective Mutism, their opinion about whether or not various forms of art therapy help children with Selective Mutism. The survey respondents' information is kept private, unless the respondent chooses to leave their email at the end of the survey. A completed response to the survey indicates that the respondent has given informed consent to participate in the survey. No harm to respondent is anticipated. The researcher will be able to see the responses, but unable to see the email addresses of respondents, unless the respondent chooses to leave the address at the end of the survey. In that case, only the principal investigator and her advisor will have access to both responses and email addresses. Surveys and respondent identifying information will be securely and separately stored pursuant to being destroyed (all as per IRB guidelines). I feel that parents, teachers, and adults (over 18 years of age) who have or have had Selective Mutism have valuable contributions to make to the literature, and I appreciate the time you take to respond to this survey.

1. Please fill in the bubble that best describes your relationship with the child with Selective Mutism. \*(If you are a teacher or former teacher of a child with Selective Mutism, please skip to question # 5.)

- parent
- current teacher
- former teacher
- person over the age of 18 with Selective Mutism

2. What age was your child/were you when formally diagnosed with Selective Mutism?  
Please fill in the button with the appropriate age.

<input type="radio"/>	<input type="radio"/>	1
<input type="radio"/>	<input type="radio"/>	2
<input type="radio"/>	<input type="radio"/>	3
<input type="radio"/>	<input type="radio"/>	4
<input type="radio"/>	<input type="radio"/>	5
<input type="radio"/>	<input type="radio"/>	6
<input type="radio"/>	<input type="radio"/>	7
<input type="radio"/>	<input type="radio"/>	8
<input type="radio"/>	<input type="radio"/>	9
<input type="radio"/>	<input type="radio"/>	10
<input type="radio"/>	<input type="radio"/>	11
<input type="radio"/>	<input type="radio"/>	12
<input type="radio"/>	<input type="radio"/>	over 12

3. What therapies, specifically for Selective Mutism, have you/has your child tried?

<input type="radio"/>	<input type="radio"/>	Anti-anxiety medications, such as fluoxetine
<input type="radio"/>	<input type="radio"/>	Behavioral therapy/modification
<input type="radio"/>	<input type="radio"/>	Play therapy
<input type="radio"/>	<input type="radio"/>	Anxiety reduction

4. If you selected either behavioral therapy/modification or anxiety reduction, please describe.

5. What grade is the child with Selective Mutism currently in? (Please indicate N/A if responder is an adult who has had or has Selective Mutism.)

6. Are any visual arts, dance, music or drama offered in your child's school that he or she participates in (that you participated in if you are an adult with SM)?

<input type="radio"/>	<input type="radio"/>	Dance
<input type="radio"/>	<input type="radio"/>	Drama
<input type="radio"/>	<input type="radio"/>	Visual arts class (drawing, painting, sculpting)
<input type="radio"/>	<input type="radio"/>	Music class

7. If you selected dance, please indicate what type(s).

8. Does the child with Selective Mutism/ did you attend any after-school activities, or extra-curricular activities? If not, please skip to question #15.

- Dance
- Drama
- Visual arts class (drawing, painting, sculpting)
- Music class

9. If you selected dance, please indicate what type(s).

10. Has the child with Selective Mutism/have you been enrolled in dance, drama, music or visual arts classes in the past, but is not currently enrolled?

- Dance
- Drama
- Visual arts class (drawing, painting, sculpting)
- Music class

11. If you chose dance, please indicate what type(s).

12. Do you feel any of these classes has been helpful to you/your child with SM? Please rate how helpful the various types of classes were for your child with SM, on a scale of 1-5, with 1 being the least helpful, and 5 being the most helpful.

	1	2	3	4	5
Dance					
Drama					
Visual arts classes (drawing, painting, sculpting)					
Music class					

13. Please feel free to add any comments about the classes you/your child with SM have taken.

14. Do you attend the classes with your child?

yes  
 no

15. What do you think is, or has been, the most helpful therapy, or combination of therapies, for you/your child with SM? Please explain.

16. This questionnaire does not provide the researcher with any personal information. If you would be comfortable with the researcher contacting you, with further questions, or clarification, please list your email here:

17. Thank you. Dalene Erickson, Principal Investigator



## REFERENCES

- Akimova, E., Lanzenberger, R., & Kasper, S. (2009). The serotonin-1A receptor in anxiety disorders. *Biological Psychiatry, 66*, 627-635. DOI: 10.1016/j.biopsych.2009.03.012
- Anari, A., Ddadsetan, P., & Sedghpour, B. (2009). The effectiveness of drama therapy on decreasing of the symptoms of social anxiety disorder in children. (Abstract). *European Psychiatry, 24*(1), p. S514. 17<sup>th</sup> EPA Congress – Lisbon, Portugal, January, 2009, Abstract book. DOI: 10.1016/S0924-9338(09)70747-3
- Bar-Haim, Y., Henkin, Y., Ari-Even-Roth, D., Tetin-Schneider, S., Hildesheimer, M., & Muchnik, C. (2004). Reduced auditory efferent activity in childhood Selective Mutism. *Biological Psychiatry, 55*, 1061-1068. DOI: 10.1016/j.biopsych.2004.02.021
- Bergman, L., Piacentini, J., & McCracken, J. (2002). Prevalence and description of Selective Mutism in a school-based sample. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*(8), 938-946.
- Black, B., & Uhde, T. (1995). Psychiatric characteristics of children with Selective Mutism: A pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(7), 847-856.

- Bogels, S., Alden, L., Beidel, D., Clark, L., Pine, D., Stein, M., & Voncken, M. (2010).  
Social anxiety disorder: questions and answers for the DSM V. *Depression and Anxiety*, 27, 168-189. DOI: 10.1002/da.20670
- Cambourne, B. (1995). Toward an educationally relevant theory of literacy learning:  
Twenty years of theory. *The Reading Teacher*. 49(3). 182-190.
- Chambala, A. (2008) Anxiety and Art Therapy: Treatment in the Public Eye. *Art Therapy: Journal of the American Art Therapy Association*, 25(4), 187-189.
- Chavira, D., Stein, M., Bailey, K., & Stein, M. (2004). Child anxiety in primary care:  
prevalent but untreated. *Depression and Anxiety*, 20, 155-164. DOI:  
10.1002/da.20039
- Chavira, D., Shipon-Blum, E., Hitchcock, C., Cohan, S., & Stein, M. (2007). Selective  
Mutism and social anxiety disorder: All in the family? *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(11), 1464-1472. DOI:  
10.1097/chi.0b013e318149366a
- Cohan, S., Chavira, D., Shipon-Blum, E., Hitchcock, C., Roesch, S., & Stein, M. (2008).  
Refining the classification of children with Selective Mutism: A latent profile  
analysis. *Journal of Clinical Child and Adolescent Psychology*, 37(4), 770-784.  
DOI: 10.1080/15374410802359759
- Cohan, S., Price, J., & Stein, M. (2006). Suffering in silence: Why a developmental  
psychopathology perspective on Selective Mutism is needed. *Developmental and Behavioral Pediatrics*, 27(4), 341-355.

- Cunningham, C., McHolm, A., & Boyle, M. (2006). Social phobia, anxiety, oppositional behavior, social skills, and self-concept in children with specific Selective Mutism, generalized Selective Mutism, and community controls. *European Child and Adolescent Psychiatry, 15*, 245-255. DOI: 10.1007/s00787-006-0529-4
- Curl, K. (2008) Assessing Stress Reduction as a Function of Artistic Creation and Cognitive Focus. *Art Therapy: Journal of the American Art Therapy Association, 25*(4), 164-169.
- Dow, S., Sonies, B., Scheib, D., Moss, S., & Leonard, H. (1995). Practical guidelines for the assessment and treatment of Selective Mutism. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(7), 836-846.
- Dummit, E., Klein, R., Tancer, N., Asche, B., & Martin, J. (1996). Fluoxetine treatment of children with Selective Mutism: An open trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*(5), 615-621.
- Dummit, E., Klein, R., Tancer, N., Asche, B., Martin, J., & Fairbanks, J. (1997). Systematic assessment of 50 children with Selective Mutism. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(5), 653-660.
- Elizur, Y., & Perednik, R. (2003). Prevalence and description of Selective Mutism in immigrant and native families: A controlled study. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(12), 1451-1459. DOI: 10.1097/01.chi.0000091944.28938.c6

- Henkin, Y., Feinholz, M., Arie, M., & Bar-Haim, Y. (2010). P50 suppression in children with Selective Mutism: a preliminary report. *Journal of Abnormal Child Psychology, 38*, 43-48. DOI: 10.1007/s10802-009-9346-9
- Johnson, H. (2007). Aesthetic experience and early language and literacy development. *Early Child Development and Care, 177*(3), 311-320. DOI: 10.1080/03004430500495576
- Johnson, M., & Wintgens, A. (2001). *The Selective Mutism resource manual*. UK: Speechmark Publishing, Ltd.
- Keen, D., Fonseca, S., & Wintgens, A. (2008). Selective Mutism: a consensus based care pathway of good practice. *Archives of Disease in Childhood, 93*, 838-844. DOI: 10.1136/adc.2007.129437
- Klein, E., & Armstrong, S. (2012). Testing expressive language in children with Selective Mutism. Handout.
- Kristensen, H. (2000). Selective Mutism and comorbidity with developmental disorder/delay, anxiety disorder, and elimination disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(2), 249-256.
- Kristensen, H. (2002). Non-specific markers of neuro-developmental disorder/delay in Selective Mutism. *European Child & Adolescent Psychiatry, 11*, 71-78.
- Kristensen, H., & Oerbeck, B. (2006). Is Selective Mutism associated with deficits in memory span and visual memory?: an exploratory case-control study. *Depression and Anxiety, 23*, 71-76.

- Kristensen, H., & Torgersen, S. (2001). MCMI-II personality traits and symptom traits in parents of children with Selective Mutism: A case-control study. *Journal of Abnormal Psychology, 110*(4), 648-652. DOI: 10.1037/0021-843X.110.4.648
- Kumpulainen, K. (2002). Phenomenology and treatment of Selective Mutism. *CNS Drugs, 16*(3), 175-180.
- Manassis, K., Fung, D., Tannock, R., Sloman, L., Fiksenbaum, L., & McInnes, A. (2003). Characterizing Selective Mutism: Is it more than social anxiety? *Depression and Anxiety, 18*, 153-161. DOI: 10.1002/da.10125
- Manassis, K., Tannock, R., Garland, D., Minde, K., McInnes, A. & Clark, S. (2007). The sounds of silence: language, cognition, and anxiety in Selective Mutism. *Journal of American Academy of Child and Adolescent Psychiatry, 46*(9), 1187-1195. DOI: 10.1097/chi.0b013e318076b7ab
- McInnes, A., Fung, D., Manassis, K., Fiksenbaum, L., & Tannock, R. (2004). Narrative skills in children with Selective Mutism: an exploratory study. *American Journal of Speech-Language Pathology, 13*, 304-315. DOI: 1058-0360/1304-0304
- McNamee, C. (2006) Experiences with Bilateral Art: A Retrospective Study. *Art Therapy: Journal of the American Art Therapy Association, 23*(1), 7-13.
- Milham, M., Nugent, A., Drevets, W., Dickstein, D., Leibenluft, E., Ernst, M., Charney, D., & Pine, D. (2005). Selective reduction in amygdala volume in pediatric anxiety disorders: A voxel-based morphometry investigation. *Biological Psychiatry, 57*, 961-966. DOI: 10.1016/j.biopsych.2005.01.038

- Norton, G., Cox, B., Hewitt, P., & McLeod, L. (1997). Personality factors associated with generalized and non-generalized social anxiety. *Person, Individ Diff*, 22(5), 655-660.
- Nowakowski, M., Cunningham, C., McHolm, A., Evans, M., Edison, S., St. Pierre, J., Boyle, M., & Schmidt, L. (2009). Language and academic abilities in children with Selective Mutism. *Infant and Child Development* 18, 217-290. DOI: 10.1002/icd.624
- Oon, P. (2010). Playing with Gladys: a case study integrating drama therapy with behavioral interventions for the treatment of Selective Mutism. *Clinical Child Psychology and Psychiatry*, 15(2), 215-230. DOI: 10.1177/1359104509352892
- Selective Mutism Group/Childhood Anxiety Network (SMG-CAN). Selective Mutism advocacy group. Website accessed April 29, 2012:  
<http://www.selectivemutism.org/>
- Sharkey, L., & McNicholas, F. (2008). More than 100 years of silence, Elective Mutism. *European Child and Adolescent Psychiatry*, 17, 255-263. DOI: 10.1007/s00787-007-0658-4
- Sharp, W., Sherman, C., & Gross, A. (2007). Selective Mutism and anxiety: A review of the current conceptualization of the disorder. *Journal of Anxiety Disorders*, 21, 568-579. DOI: 10.1016/j.janxdis.2006.07.002
- Shipon-Blum, E. (2001). *The ideal classroom setting for the selective mute child*. Philadelphia, PA: Selective Mutism Anxiety Research & Treatment Center Publishing.

- Shipon-Blum, E. (2012). *What is social communication anxiety treatment (S-CAT)?*  
Handout.
- Standart, S., & LeCouteur, A., (2003). The quiet child: A literature review of Selective Mutism. *Child and Adolescent Mental Health, 8*(4), 154-160.
- Steinhausen, H., & Adamek, R. (1997). The family history of children with Elective Mutism: A research report. *European Child and Adolescent Psychiatry, 6*, 107-111.
- Steinhausen, H., & Juzi, C. (1996). Elective Mutism: An analysis of 100 cases. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*(5), 606-614.
- Treadwell, T., Kumar, V., & Wright, J. (2002). Enriching psychodrama through the use of cognitive behavioral therapy techniques. *Journal of Group Psychotherapy, Psychodrama & Sociometry, Summer/Fall*, 55-65.
- Ustinova, A. (2009). Pilot Research: Evaluation of the effectiveness of the dance movement therapy (training) (movement oriented paradigm for therapeutic work in groups). (Abstract). *European Psychiatry, 24*(1), p. S1061. 17<sup>th</sup> EPA Congress – Lisbon, Portugal, January, 2009, Abstract book.
- Vecchio, J., & Kearney, C. (2009). Treating youths with Selective Mutism with an alternating design of exposure-based practice and contingency management. (Electronic version.) *Behavior Therapy, 40*, 380-392.
- Yeganeh, R., Beidel, D., & Turner, S. (2006). Selective Mutism: More than social anxiety? *Depression and Anxiety, 23*, 117-123. DOI: 10.1002/da.20139

Yeganeh, R., Beidel, D., Turner, S., Pina, A., & Silverman, W. (2003). Clinical distinctions between Selective Mutism and social phobia: An investigation of childhood psychopathology. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(9), 1069-1075. DOI: 10.1097/01.CHI.0000070262.24125.23