Parent Training Workshop for Children with Selective Mutism: a Randomized-Controlled Trial

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ABSTRACT

PARENT TRAINING WORKSHOP FOR CHILDREN WITH SELECTIVE MUTISM:
A RANDOMIZED-CONTROLLED TRIAL

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Northern Illinois University, 2023
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The present study aimed to examine the efficacy of a parent-based workshop for child
anxiety adapted from a novel parent-based intervention, Supportive Parenting for Anxious
Childhood Emotions (SPACE). This study expanded upon the current literature as the
intervention was conducted with a sample consisting of parents with children who have selective
mutism (SM). The sample included 53 parents ($M_{\text{age}} = 40.34$ years, 98% female, 77.4% White)
of children who have SM symptoms. Participants were randomly assigned to the parent
workshop condition ($n = 26$) or the waitlist control condition ($n = 27$). Participants in the
workshop condition completed a 6-week workshop that focused on identifying, tracking, and
reducing an accommodation specific to SM. Data were collected pre- and post-workshop (T1 and
T2, respectively). It was predicted that participants in the workshop condition would show a
greater decrease in family accommodation, family accommodation of SM, parenting stress,
parent anxiety, child anxiety, SM symptoms, and child disruptive behaviors at T2 relative to T1
compared to the waitlist control group. Most hypotheses were unsupported; however, a 2x2
mixed design repeated measures ANOVA demonstrated a significant interaction between
condition and time for family accommodation of SM. Results were also trending towards
significance for parent anxiety. For both outcomes, there was a significant decrease over time
within the workshop group, whereas both variables were stable across time in the waitlist control group. Additionally, parents’ subjective reports of their experiences participating in the parent workshop indicated it was helpful and promoted change. Multiple design factors likely contributed to the lack of significant findings, though the results support the value of continued research in the impact of parent-only interventions for children with SM. Future research should consider different lengths and modalities of the abbreviated workshop, different individuals the workshop could target (e.g., school staff), and how interventions such as these impact families from diverse backgrounds.
PARENT TRAINING WORKSHOP FOR CHILDREN WITH SELECTIVE MUTISM:
A RANDOMIZED-CONTROLLED TRIAL

BY

JACQUELINE M. PABIS
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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL
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Doctoral Director:
Laura D. Pittman
I would like to thank my advisor, Dr. Laura Pittman, for her invaluable supervision and support throughout the course of my PhD degree. I also could not have undertaken this study without my defense committee, who generously provided knowledge and expertise. I would especially like to acknowledge Dr. Carmen Lynas for believing in me since I was an undergraduate and sparking my passion for the treatment of selective mutism. Additionally, I would like to extend my sincere gratitude to the co-facilitators of the parent training workshop, including Lauren Hauck, Sabrina Ung, Cassandra Booker, and Sophie Zolinski. Your clinical expertise and passion were treasured by both myself and the participants.

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CHAPTER 1
INTRODUCTION AND LITERATURE REVIEW

Anxiety disorders have lifetime prevalence rates of up to 30% in children and adolescents (Costello et al., 2005; Merikangas et al., 2010), making it the most common mental health difficulty for young people. Childhood anxiety has been linked to negative outcomes across domains of functioning, including academic, social, home, and personal difficulties (Drake & Ginsburg, 2012; Greco & Morris, 2004; Muroff & Ross, 2011). Among the anxiety disorders is selective mutism (SM), which is characterized by the consistent failure to speak in particular settings (e.g., school, social settings), despite speaking in other settings (e.g., home; American Psychiatric Association [APA], 2013). While the etiological factors that may contribute to the onset vary for each individual, avoidance that is facilitated by the child, caregivers, and other environmental surroundings is a factor that maintains SM symptoms across children (Muris & Ollendick, 2015). Children with SM have been shown to have delays in cognitive, academic, and social developmental domains (Østergaard, 2018). Related difficulties can also persist into adulthood, including struggles with self-confidence, independence, achievement, and social communication skills (Remschmidt et al., 2001). Psychotherapy treatment options, such as cognitive behavioral therapy (CBT), have shown to be effective for anxiety disorders, in general, and SM, specifically (Østergaard, 2018; Reynolds et al., 2012); however, many children continue to display significant anxiety symptoms and even meet diagnostic criteria following treatment (Silverman et al., 2008) or are unable to initiate treatment due to the severity of symptoms.
Thus, additional research is needed on alternative interventions that directly target factors that maintain anxiety symptoms, such as avoidance. The need for more research is particularly true for SM as there is sparse research relative to other anxiety disorders (Østergaard, 2018).

Selective Mutism

In the most recent Diagnostic and Statistical Manual (DSM) of Mental Disorders (APA, 2013), selective mutism (SM) was changed from being categorized as a “disorder usually first diagnosed in infancy, childhood or adolescence” to being an anxiety disorder. Historically, the condition was referred to as “voluntary aphasia” (Kussmaul, 1877) and later “elective mutism” (Tramer, 1934) which suggests children choose not to speak in specific situations. In the fourth edition of the DSM (DSM-IV; APA, 1994), the word “elective” was replaced with “selective” signifying a change in the child’s motivation (i.e., child is not “choosing” to be mute) and specifying that mutism only occurs in particular settings. Despite SM being categorized with the anxiety disorders in the DSM-5 in 2013, anxiety symptomatology is not included in the diagnostic criteria. The primary diagnostic criterion includes the consistent failure to speak in social situations when there is an expectation to speak (e.g., school, social settings) despite readily speaking in other situations (e.g., home; APA, 2013). Even within the home setting, children with SM may speak to immediate family but not in front of extended family, such as grandparents or cousins. The failure to speak must be present for at least one month, not including the first month of school given that many children experience anxiety during transitions (Muris & Ollendick, 2015). Further, the difficulty must interfere with educational or occupational achievement or with social communication. The failure to speak cannot be
attributed to lack of knowledge or comfort with the spoken language required in the social situation and cannot be better explained by a communication disorder or occur exclusively during the course of autism spectrum disorder, schizophrenia, or another psychotic disorders (APA, 2013).

The DSM and reviews suggest SM is a relatively rare disorder occurring between 0.03% and 1.90% in the population (APA, 2013; Viana et al., 2009). The prevalence rate varies depending on where the sample was obtained (e.g., clinical settings, school settings, general population) and the age range of children included. The mean onset of symptoms occurs between 2.7 and 4.1 years; however, it typically goes undetected until children enter a school setting where there is an expectation to speak (Viana et al., 2009). SM is primarily conceptualized as a childhood anxiety disorder (APA, 2013); though, mutism symptoms can persist and become less responsive to treatment over time (Kratochwill, 1981; Kratochwill et al., 1979; Labbe & Williamson, 1984). Further, research suggests SM occurs more commonly in females compared to males at a 1:2 or 1:1.2 ratio (Cohan et al., 2008; Driessen et al., 2020; Mulligan et al., 2015). There is no evidence that prevalence rates vary across race or ethnicity (APA, 2013).

Although the presence of anxiety is not a symptom needed to receive a diagnosis of SM, research has examined the relationship between SM and anxiety by assessing comorbidity rates with other anxiety disorders. A recent meta-analysis found 80% of children diagnosed with SM met criteria for at least one additional anxiety disorder (Driessen et al., 2020). The large majority of children had a comorbid diagnosis of social anxiety disorder (69%), whereas other diagnoses included specific phobia (19%), separation anxiety (18%), generalized anxiety disorder (6%), and obsessive-compulsive disorder (6%). Despite a large comorbidity rate, approximately 20% of children met diagnostic criteria for SM without a comorbid anxiety disorder. It should be
noted that anxiety within SM literature is not examined in a systematic way given the lack of anxiety-based diagnostic criteria; however, certain researchers question whether SM is appropriately categorized in the DSM-5 given that children can be diagnosed without experiencing anxiety (Driessen et al., 2020). Other professionals also debate whether SM may be a subtype of social anxiety disorder or even a more severe subtype of anxiety in general (e.g., Black & Uhde, 1992; Keeton & Crosby, 2012). Initial research suggests SM and social anxiety are different disorders; though, given the low prevalence rates of SM, little research has focused on this disorder specifically.

Given the categorization of SM as an anxiety disorder and high comorbidity rates with other anxiety disorders, research suggests that a developmental psychopathology theoretical model (Cicchetti, 1984) for the etiology of SM is appropriate (Muris & Ollendick, 2015; Viana et al., 2009), consistent with other anxiety disorders. The available evidence indicates the etiology of SM stems from an interaction of vulnerability factors, including genetic, temperamental, neurodevelopmental, and environmental factors (Cohan et al., 2006; Muris & Ollendick, 2015; Viana et al., 2009). Regarding genetic factors, Remschmidt et al. (2001) found SM occurs at higher rates within families. Further, parents of children with SM have also been shown to be shyer, have greater social anxiety, and prefer solitary activities compared to controls (Kristensen & Torgersen, 2001, 2002). Other research has found no significant differences in anxiety, depression, or emotional or behavioral control between parents of children with SM and controls (Elizur & Perednik, 2003). Research has begun to examine SM prevalence in monozygotic twins and specific gene vulnerability (i.e., contactin-associated protein-like 2-gene) which point to genetic heritability (Stein et al., 2011), though additional behavioral genetic and DNA studies are needed for support.
Temperament and neurodevelopmental factors have also been found to play a role in SM. Specific to temperament factors, researchers hypothesize children with SM may exhibit behavioral inhibition, a construct defined as consistently showing fearfulness and avoidance in unfamiliar situations (Kagan, 1994); however, only initial cross-sectional research supports this notion. Specifically, shyness (i.e., considered a variant of behavioral inhibition) was observed in 68%-85% of children diagnosed with SM (Steinhausen & Juzi 1996). Similarly, Kristensen and Torgersen (2002) found parents of children with SM rated their children higher on shyness and lower on sociability compared to controls. Additionally, mild oppositionality is another temperament construct that has been associated with SM (e.g., Cohan et al., 2008); however, research findings that investigate symptoms of oppositional defiant disorder and externalizing symptoms broadly have been mixed (Muris & Ollendick, 2015). For example, Vecchio and Kearney (2005) did not find significant differences in externalizing problems between children with SM, other anxiety disorders, or controls. Regarding neurodevelopmental factors, research suggests language deficits (Manassis et al., 2007) and underdeveloped social skills (Carbone et al., 2010) serve as risk factors for the onset of SM. Some argue that SM may be associated with a broader developmental delay in addition to communicative skills, including greater pre- and perinatal problems, abnormal auditory efferent activity, and motor delays (Arie et al., 2007; Kristensen, 2000, 2002).

Finally, numerous environmental factors have been hypothesized to contribute to the onset of SM, though research is sparse. Initially it was thought that family dysfunction or traumatic and stressful events contributed to the onset of SM, though Muris and Ollendick (2015) note that causal relationships have not been established. Additional factors studied include high levels of parental control (Edison et al., 2011), parent relationship difficulties (e.g.,
marriage problems, arguments in front of child; Elizur & Perednik, 2003), negative academic or social experiences at school (Kolvin & Fundudis, 1981; Levin-Decanini et al., 2013), and immigrant status (Manassis et al., 2007). It should be noted that findings supporting the associations between environmental factors and SM have also been mixed (e.g., Muris & Ollendick, 2015).

Despite unique risk factors interacting and contributing to the onset of SM difficulties for each particular child, avoidance has been identified as a clear mechanism that maintains symptomatology, similar to other anxiety disorders (Muris & Ollendick, 2015). Scott and Beidel (2011) posit that mutism may actually be a maladaptive emotion regulation strategy in anxiety-provoking situations. For example, when a child is expected to speak, it is likely to be emotionally arousing. Therefore, mutism may be an automatic behavior used in an avoidant manner to lessen discomfort and extreme emotional arousal in stressful social situations. Additional research by Young et al. (2012) has provided support for this idea such that when children were asked to engage in a role-play including social interaction with a same-aged peer, observational measures indicated children with SM had higher levels of anxiety than children with social anxiety disorder and typically-developing controls; however, physiological measures (i.e., electrodermal activity, heart rate) found children with SM had less arousal than other children. Beyond child behaviors, environmental influences, such as parents’ response to child anxiety, can also promote avoidant behavior and thus maintain symptoms (Lebowitz, 2019).

Parent Responses to Anxiety

At birth, parents are highly vigilant of their children’s environment in order to ensure safety and comfort (Leckman et al., 2004); however, this evolutionary-based behavior gradually
decreases as children get older and parents gain knowledge and confidence in child rearing (Leckman et al., 1999). Decreases in hypervigilance of the child’s environment is likely more difficult for parents of children with anxiety disorders given that child anxiety can trigger the attachment system comprised of interrelated biological, behavioral, cognitive, and affective responses between parents and children (Nolte et al., 2011). Thus, while it is a natural reaction for parents to modify the environment to decrease distress in their children, this behavior is problematic in children with anxiety disorders (Lebowitz, 2021; Norman et al., 2015).

Family accommodation has been identified as a construct to represent parents’ over responsiveness to child anxiety (Lebowitz, 2019, 2021; Lebowitz et al., 2013). More specifically, it is defined as changes that parents and families make in their own behavior because of their child’s anxiety (Lebowitz, 2019, 2021). Research suggests, while there is some overlap, there are two distinct forms of family accommodation: participation in anxious behaviors and modification of family routines and schedules (Lebowitz, 2019, 2021). Lebowitz (2019) identified that parents’ behaviors can be active (i.e., acting preemptively to help children avoid anxiety provoking situations) or passive (i.e., refraining from particular behaviors that could trigger their child’s anxiety). Specific to selective mutism, active accommodating behaviors may include speaking for their child (e.g., answering questions, asking questions, placing orders) or asking teachers not to call on their child, while passive accommodating behaviors could include forgoing restaurants and social gatherings where there is an expectation to speak. It should be noted that parenting behaviors (e.g., overprotection, overcontrol, low autonomy granting, rejection, criticism) have been found to account for a small amount of unique variance in childhood anxiety (Lebowitz, 2019; McLeod et al., 2007); however, family accommodation is conceptualized as occurring as a response to symptoms rather than causing them (Lebowitz,
2019). In fact, findings suggest the degree of family accommodation accounted for 20% of unique variance in child anxiety (Lebowitz, 2019; Lebowitz et al, 2013).

Research indicates nearly all (i.e., at least 95%) mothers of children with anxiety engage in family accommodation (Benito et al., 2015; Lebowitz et al., 2013, 2014b; Thompson-Hollands et al., 2014). Similarly, fathers also report high levels of family accommodation (i.e., 88%; Thompson-Hollands et al., 2014). This behavior has been studied across varying ethnic and cultural backgrounds across the world, which demonstrates the highly frequent and consistent response to child anxiety in parents (Lebowitz, 2019). Because children rely on their parents to assist them in coping with fear, there is likely greater awareness of their child’s fears and increased motivation to “rescue” their child or provide reassurance among families with a child with SM (Lebowitz, 2019). Thus, parents’ response to child anxiety is well-intentioned. Family accommodation may provide immediate relief; however, it also maintains symptoms over time because it teaches children to rely on their parents for emotion regulation and avoid feared stimuli, which minimizes opportunity for “developmentally-appropriate functional experiences” (Lebowitz, 2019). Not surprisingly, numerous studies have found that greater frequency of family accommodation is associated with greater anxiety symptoms (Kagan et al., 2016; Lebowitz et al., 2013, 2016; Norman et al., 2015; Reuman & Abromowitz, 2017; Storch et al., 2015). This finding has been consistent across raters (i.e., children rating family accommodation and parents rating child anxiety; parents rating family accommodation and children rating their anxiety; Lebowitz et al., 2015b). In addition to heightened anxiety symptoms, further consequences of family accommodation include reductions in self-regulation, insight (i.e., increases in cognitive distortions), confidence, and motivation for treatment (Lebowitz, 2019).
Parents may engage in accommodating behaviors for reasons beyond reducing their child’s distress. For example, Lebowitz (2019) suggests accommodation may occur to increase the child’s or family’s functioning, protect the child’s social status (e.g., avoid judgement), convey love to their child, or avoid aggressive behavior. Additionally, parents may hold beliefs about anxiety such that it is harmful and should be avoided. Given that most anxious children also have a parent who experiences anxiety (Eley et al., 2015; Lebowitz et al., 2016), anxious parents may be even more motivated to avoid their own distress or embarrassment and may have developed maladaptive coping strategies, such as avoidance, thus making them more likely to engage in family accommodation. Collectively, both children and parents become trapped in a cycle of family accommodation, leading to avoidance and maintenance of symptoms. While the relationship between family accommodation and anxiety symptoms broadly across disorders (i.e., generalized anxiety disorder, social anxiety disorder, separation anxiety disorder, and specific phobia) has been studied (Lebowitz et al., 2020), the link has yet to be studied in SM specifically. However, a case study has established initial evidence of family accommodation as a primary maintaining factor of one child’s mutism (Reuther et al., 2011).

Interventions for Anxiety

Some children with SM have been found to have symptoms that gradually decrease over time while others have more persistent symptoms and may experience spontaneous remission of core symptoms in adolescence or adulthood, where they are able to produce verbal behaviors; although, deficits in communication, social withdrawal and psychosocial functioning may still be present (Steinhausen et al., 2006). Given the developmental delays in children with SM during early childhood as well as increased risk for psychological difficulties later in life (Østergaard,
2018), a focus on early intervention efforts for SM is critical. Psychosocial and pharmacotherapy interventions (i.e., primarily selective serotonin reuptake inhibitors [SSRIs]) have been evaluated. While some studies have found improvement with the use of SSRIs, a meta-analysis suggests psychosocial interventions have a stronger effect for SM (Østergaard, 2018). Further, at this point in time, medication or the combination of medication and psychosocial intervention is primarily indicated for treatment resistant SM symptoms (Østergaard, 2018); thus, the current study will focus on psychosocial interventions. There is an array of psychosocial interventions from numerous theoretical perspectives (Cohan et al., 2006; Zakszeski & DuPaul, 2017), though the empirical support for use of cognitive behavioral therapy (CBT; i.e., combination of techniques from cognitive and behavioral theoretical underpinnings) is most notable to address anxiety (Reynolds et al., 2012).

Broadly, CBT assumes psychopathology, in this case anxiety, emerges due to cognitive biases or maladaptive beliefs and learned maladaptive behavior (Shapiro, 2015). Cognitive techniques include self-monitoring (i.e., thought logs to raise awareness of the relationship between thoughts, feelings, and behaviors), self-instruction (i.e., purposeful statements to manage dysregulation), self-regulation, self-reinforcement, Socratic questioning (i.e., technique of guided discovery that helps clients to have a more realistic view of themselves and life), cognitive restructuring (i.e., change unrealistic or maladaptive thoughts), tests of evidence (i.e., evaluate evidence for and against a thought to determine if it is realistic), and personal experiments (i.e., experiment to test hypothesis of maladaptive thought; Shapiro, 2015). Further, behavioral techniques include classical conditioning, operant conditioning (e.g., use of shaping, successive approximation, chaining), exposure therapy (e.g., imaginal, in vivo), contingency management (i.e., identified goals with reinforcements), relaxation training, and social skills
training (Shapiro, 2015). Clinicians are unsure the extent to which cognitive maturity is necessary for children to fully engage in cognitive behavioral therapy (Barrett, 2000; Cartwright-Hatton et al., 2004; Grave & Blissett, 2004); therefore, a common response is to focus on behavioral aspects of CBT interventions for younger children (Stallard, 2002).

Research suggests that CBT, in an array of formats, is effective to address child anxiety relative to passive (i.e., no treatment control groups) or active alternative interventions (Reynolds et al., 2012). In regard to CBT interventions for SM specifically, most research until recently focused on single-case reports and case-series (Østergaard, 2018, Viana et al., 2009); however, there is increasing support for its efficacy. For example, a randomized control trial comparing a 21-session home- and school-based CBT intervention for children ages 3-9 found improvement in speech production compared to a waitlist control group (Oerbeck et al., 2014). These treatment gains were maintained at a one-year post-treatment follow-up assessment (Oerbeck et al., 2015). At five years post-treatment, about 2/3 of children (i.e., 21 of 30 included in final assessment) were in full remission of SM symptoms and treatment gains were maintained across time according to parent and teacher report (Oerbeck et al., 2018). Despite most children being able to speak outside of the home, about 50% reported it was still challenging. Similarly, Bergman et al. (2013) found nine of 12 participants (i.e., children ages 4-8) responded to 20 sessions of CBT. There were significant increases in speaking behavior and number of words spoken compared to a waitlist control group (i.e., 12 weeks) and treatment gains were maintained six months post treatment; however, teacher ratings did not indicate a significant decrease of social anxiety in the school setting. Additional research designs, including a retrospective naturalistic follow-up study, an uncontrolled pilot-study, and pre- and post-group intervention study also show support for CBT interventions for children with SM (ages 3-12). Consistent with
randomized controlled trials, maintenance of treatment gains were found up to one year later (Lang et al., 2016; Oerbeck et al., 2012; Sharkey et al., 2008). Although there is increasing support, a key limitation within this literature is the sample sizes utilized. For example, CBT intervention studies reviewed by Østergaard (2018) range from five to 24 participants. Given children with SM have difficulty communicating, there is also a great focus on behavioral strategies alone. For example, children may be rewarded for initial approximations to communicate (e.g., non-verbal communication) which is eventually shaped into verbal communication (Viana et al., 2009). Further, stimulus fading is utilized to gradually generalize verbalizations from family members or one clinician to multiple people (Viana et al., 2009). Research suggests that behavioral strategies are efficacious as well (Cohan et al., 2006; Zakszeski & DuPaul, 2017).

Given the relationship between parenting behaviors or family accommodation and child anxiety (Lebowitz, 2019; Lebowitz et al, 2013), parent involvement in CBT interventions has been another domain of considerable research. Oftentimes when parents are included in treatment, they receive psychoeducation and training to serve as lay therapists in order to implement CBT strategies with the child outside of a clinical setting (Lebowitz et al., 2014a). CBT interventions may also focus on teaching generic parenting skills, such as problem solving (Lebowitz et al., 2014a). Randomized control trials that compare outcomes for childhood anxiety interventions with and without parent involvement show mixed findings. For example, one study found a clear benefit of parental involvement in the treatment of anxiety (Barrett et al., 1996), while others have found nonsignificant trends that parental involvement may be beneficial (Cobham et al., 1998; Heyne et al., 2002; Mendlowitz et al., 1999; Wood et al., 2006). Alternatively, multiple studies found no effect of parent involvement (Nauta et al., 2001, 2003;
Siqueland et al., 2005). Similarly, numerous meta-analyses of CBT for child anxiety broadly find no differences in effect sizes between trials which include or exclude parents (In-Albon & Schneider, 2007; Ishikawa et al., 2007; James et al., 2005, Reynolds et al., 2012; Silverman et al., 2008). Given the limited literature on SM interventions generally, there is very little research on parent involvement in SM treatment specifically; however, there are certain interventions that have been adapted to incorporate parents. For example, parent-child interaction therapy (PCIT), a well-established treatment for behavioral disorders (Funderburk & Eyeberg, 2011), was adapted as an intervention for SM (PCIT-SM; Carpenter et al., 2014; Cotter et al., 2018). Similar to CBT broadly, this approach trains parents to be lay therapists by providing skills to help parents warm a child up in anxiety-provoking settings, reinforce desired behaviors (i.e., verbalizations), and facilitate community exposures (Catchpole et al., 2019). Research suggests PCIT-SM is effective such that there are large gains in speaking behaviors across settings (Catchpole et al., 2019).

Limitations of Interventions

Despite CBT being the most empirically supported intervention to address anxiety and SM specifically, historically there have been numerous children who do not show significant improvement after treatment. Specifically, a meta-analysis by Silverman et al. (2008) found overall that CBT interventions resulted in 46% diagnostic recovery (i.e., no longer meeting criteria for the specific anxiety disorder). Similar to anxiety broadly, studies examining the effects of CBT in children with SM found a 50-67% diagnostic recovery rate immediately after the intervention (Bergman et al., 2013; Oerbeck et al., 2015). Collectively, this demonstrates that the current gold-standard treatment may be insufficient for a significant number of children in
clinical trials. There are multiple proposed reasons why CBT may be ineffective for some children.

Child characteristics could serve as one reason CBT is not efficacious for a greater number of children. For example, techniques used in CBT require frequent collaboration between a therapist and child, which is often unattainable due to high levels of anxiety (Lebowitz et al., 2014a). This is likely even more difficult for children who have SM given the primary characteristic of the failure to speak and oftentimes typical protocols need to be adapted for this reason (Østergaard, 2018). Some children with anxiety decline to participate in treatment altogether (e.g., Walkup et al., 2008). For example, a review of descriptive studies found that only 60% of children with SM receive an evaluation or treatment (Cohan et al., 2006). This may be due to high levels of anxiety or it may be that children struggle to recognize their anxiety as problematic if they are able to function in day-to-day activities, likely because of family accommodations being made (Lebowitz et al., 2014a, 2014b). Further, as noted earlier, children with anxiety and SM specifically can have oppositional tendencies (Cohan et al., 2008) which may further make collaboration and active engagement in therapy difficult.

In addition to child characteristics, the primary treatment focus of CBT may also limit intervention efficacy. Although CBT teaches children a number of strategies to regulate their distress due to anxiety, it does not directly address environmental factors that contribute to the maintenance of symptoms. For example, even when parents are involved in treatment, they are often taught to facilitate children’s skills outside of treatment; however, the parents’ response to their child’s anxiety (i.e., typically accommodating behavior) is rarely a primary focus of treatment. Research suggests that when parents engage in accommodating behavior, the child’s motivation to engage in individual treatment is reduced and treatment response to CBT may be
poorer (Kagan et al., 2016; Lebowitz et al., 2013; Norman et al., 2015; Salloum et al., 2018; Settipani, 2015). Thus, CBT offers many benefits, though it may not be maximally useful if factors within the child’s environment are maintaining symptomatology. When children are unable or unwilling to participate in treatment, or when children do not respond to child-focused interventions, parent interventions offer an alternative strategy (Lebowitz et al., 2014a).

**Parent-Only Interventions**

Parent-only interventions for child anxiety are relatively rare compared to child-focused or family-focused approaches; however, research indicates this approach may be promising. Most parent-only interventions train parents to deliver CBT to their children in the home setting as lay therapists (e.g., Cartwright-Hatton et al., 2011; Thirlwall et al., 2013). Thus far, research is encouraging about the efficacy of this method. For example, a study conducted by Cartwright-Hatton et al. (2011) found that a parent-only 10-session CBT group format intervention for children aged nine years and below resulted in 57% of children no longer meeting diagnostic criteria for their primary anxiety disorder compared to 15% in the waitlist control condition. Similarly, Thirlwall et al. (2013) found that a parent-only CBT intervention (i.e., parents delivering CBT to their own children) for eight weeks in addition to telephone check-ins resulted in a 50% recovery rate from the primary anxiety diagnosis in children 7-12 compared to 25% on the waitlist. In addition to clinical trials, pilot studies have also supported the use of parent-only interventions for anxiety (Cartwright-Hatton et al., 2005; Thienemann et al., 2006). Although these studies show encouraging results, the intervention still does not focus on environmental factors that may contribute to maintenance of symptoms. Thus, Lebowitz and Omer (2013)
developed an alternative parent-only intervention, Supportive Parenting for Anxious Childhood Emotions (SPACE).

Rather than training parents to teach their anxious child CBT strategies, SPACE utilizes a unique approach that targets the core attachment dynamic: children’s need for, and parent’s tendency to provide protection and emotion regulation strategies when their children are distressed (i.e., family accommodation; Lebowitz, 2021; Lebowitz et al., 2014b, 2019; Lebowitz & Omer, 2013). The program views child anxiety as a systemic rather than an individual problem and, thus, focuses on changing parent behaviors that may maintain anxiety. Specifically, the program trains parents to identify and monitor family accommodation, develop and execute a plan that gradually addresses and reduces family accommodation, and prepare the family for an array of child responses (e.g., distress, aggression) to changes in family accommodation (Lebowitz 2021; Lebowitz et al., 2014a, 2019; Lebowitz & Omer, 2013). Because the intervention solely focuses on changes in parent behavior, SPACE can be implemented when children are unwilling or unable to attend child-focused interventions or when interventions are ineffective. The intervention was designed to be flexible such that it can be delivered as a stand-alone treatment or combined with CBT protocols (Lebowitz et al., 2020; Raila et al., 2020). Further, it can be utilized in both individual and group formats (Dekel et al., 2020; Lebowitz et al., 2020) and is frequently conducted via telehealth to increase access for parents (E. Lebowitz, personal communication, 6/14/2021).

An initial open trial of SPACE was found to be effective with parents of 10 children (ages 9-13) with primary diagnosis of generalized anxiety disorder, separation anxiety disorder, social phobia, or obsessive-compulsive disorder. Specifically, there was a significant decrease in child anxiety symptoms and family accommodation (Lebowitz et al., 2014a). There was also a
reduction in depressive symptoms which approached significance (Lebowitz et al., 2014a). After the intervention, 70% of families reported increased motivation and willingness to participate in individual treatment. When delivered in a group format, SPACE showed similar effectiveness for parents of 25 children (mean age of 11.14 years) who met diagnostic criteria for an anxiety disorder or obsessive-compulsive disorder such that severity of symptoms and family accommodation were significantly reduced post-intervention (Dekel et al., 2020). Individual case studies have also shown the SPACE program to be effective at reducing child symptoms for children with numerous presenting problems including social anxiety, agoraphobia, obsessive-compulsive disorder, and avoidant/restrictive food intake disorder (Lebowitz & Majdick, 2020; Lebowitz & Shimshoni, 2018; Raila et al., 2020; Shimshoni & Lebowitz, 2020). Further, Lebowitz et al. (2020) conducted a non-inferiority study of SPACE with parents compared to child-only exposure-based CBT for 124 children (ages 7-14 years) with primary diagnoses of generalized anxiety disorder, social phobia, separation anxiety disorder, and specific phobia. Results indicated that SPACE was not an inferior treatment to child-only CBT. Specifically, results demonstrated a similar reduction in anxiety symptoms based on a clinician-administered anxiety severity measures (i.e., Pediatric Anxiety Rating Scale [PARS]; Research Units on Pediatric Psychopharmacology Anxiety Study Group [RUPP], 2002) and parent and child ratings of anxiety on questionnaires. There were also similar rates of children who were classified as responders to treatment (87.5% for SPACE and 75.5% for CBT) and experienced remission of symptoms (58.3% for SPACE and 59.2% for CBT). Further, family accommodation rated by parents was significantly reduced in both interventions; however, there was a greater reduction in family accommodation following SPACE compared to CBT. Similar to the open trial, treatment
credibility and satisfaction were high and similar for SPACE and CBT. Collectively, this study supported that SPACE is as efficacious as CBT.

In addition to the primary outcome goals of SPACE, the intervention has demonstrated additional benefits. One study found that parents had a significant reduction in parenting stress in both SPACE and CBT interventions (Lebowitz et al., 2020). Similarly, Lebowitz et al. (2014a) found parents had a non-significant reduction in self-reported anxiety symptoms. When delivered in a group format, results suggested that parents reported significant decreases in family power struggles and parental sense of hopelessness (Dekel et al., 2020). Taken together, initial research thus far suggests that because SPACE holds a systemic view of child anxiety, benefits can be seen for both children and their parents. While there are no empirical or published cases studies, anecdotally, SPACE has been successfully used with children with SM (E. Lebowitz, personal communication, 6/17/2021).

**Intervention Format and Modality**

Given that SM is a relatively rare disorder that often requires adaptation of typical protocols (Østergaard, 2018), consideration of how to provide the intervention easily to families who may not have easy access to clinicians with expertise in SM is needed. First, there is some indication that provision of SPACE using a group format is effective, and may even provide some benefits. While most existing research on the SPACE program has been conducted using an individual format (e.g., Lebowitz et al., 2014a, 2020), Dekel et al. (2020) found similar outcomes of the parent-only intervention in a group format such that family accommodation and anxiety were significantly reduced post-intervention. Further, additional parent-only interventions (i.e., training parents as lay CBT therapists) in a group format have been shown to
be effective at reducing internalizing symptoms (Cartwright-Hatton et al., 2005, 2011). Research has also identified multiple benefits to a group format. For example, because there are often long waitlists for mental health treatment and a limited availability for child-focused CBT therapists specifically, a group format offers a convenient and efficient way to address symptomatology (Liber et al., 2008; Stallard, 2009; Wolgensinger, 2015). Additionally, a group format may offer a greater sense of connectedness through positive peer modeling, reinforcement of one another, and social support (Wolgensinger, 2015). The sense of connectedness groups may provide could be particularly meaningful for parents of children with SM because their child’s difficulties are unique and rare relative to other children’s anxiety disorders.

In addition to the format of interventions, consideration of the modality has become increasingly important. Over the past decade, there has been movement toward the use of technology to increase access to mental health; however, this effort became particularly important during the global pandemic due to the Coronavirus disease 2019 (COVID-19) given that services were almost entirely provided via telehealth (McLean et al., 2021; Ros-Demarize et al., 2021). Given the more recent, consistent use of technology, there is minimal intervention literature on telehealth modalities (Ros-Demarize et al., 2021). However, a meta-analysis suggests that videoconferencing is as effective as in-person services for adults with a range of difficulties (Drago et al., 2016). Further, initial research studying treatments of child internalizing disorders specifically has demonstrated promising effects. For example, randomized controlled trials of telehealth delivery of family-based CBT (i.e., child therapy that incorporates parents to help implement behavioral components of therapy) resulted in a greater reduction of internalizing symptoms (i.e., symptoms of obsessive-compulsive disorder) and remission for diagnostic criteria relative to a waitlist control group or similar outcomes to a
clinic-based, in-person intervention (Comer et al., 2017; Storch et al., 2011). Further, a multiple baseline-design study that assessed telehealth delivery of family-based CBT for anxiety disorders found similar positive treatment responses, which were maintained three months post-intervention (Carpenter et al., 2018). In addition to the support for efficacy of telehealth-delivered interventions, families using this modality report fewer barriers to treatment compared to clinic-based interventions (Comer et al., 2017). For example, access to treatment becomes more feasible as families no longer have to consider geographic distance or time spent traveling to appointments, transportation barriers, or childcare concerns (Carpenter et al., 2018; McLean et al., 2021). Additionally, parents have good retention rates and report high satisfaction and a strong therapeutic alliance when using telehealth (Carpenter et al., 2018). Collectively, research supports the use of a telehealth-delivered group intervention format as it increases access and feasibility of treatment for parents and provides a supportive, collaborative environment for parents of children with a relatively uncommon disorder.

This Study

Although there is substantial research supporting cognitive behavioral interventions for anxiety and, to a lesser degree, SM specifically, not all children demonstrate meaningful symptom reduction (Silverman et al., 2008). Alternative interventions, such as parent-based interventions, have shown initial efficacy in decreasing child anxiety symptoms by targeting decreased family accommodation (Lebowitz et al., 2020). Specific SM interventions (e.g., PCIT-SM) may provide some focus on parents’ accommodating behaviors in response to child anxiety; however, it is typically not a primary goal. Therefore, the current study examined the efficacy of a parent training workshop based on SPACE, a novel empirically-supported, parent-based
intervention in parents of children with SM through a randomized controlled trial, using an intervention and waitlist control group. Initial research demonstrated the SPACE protocol is effective in individual and group formats (Dekel et al., 2020; Lebowitz et al., 2014a, 2020); therefore, given efficiency and benefits of group interventions (e.g., increased peer support, opportunity for role playing, feedback), the current study aimed to replicate findings in a group format. The current study also examined the practicality of an abbreviated parent training workshop based on SPACE in a clinical setting. As such, a 6-week group parent training workshop (90 minutes per session) was delivered that focused on the “treatment parts” (i.e., standard sessions that are conducted each time the protocol is implemented; Lebowitz & Omer, 2013). Further, because SM is considered a rare psychiatric condition (APA, 2013), the current study examined whether the parenting training workshop based on SPACE is effective in an online format in an effort to increase access to treatment and create a supportive community.

Hypotheses

The SPACE protocol is unique such that it places family accommodation, a behavior that contributes to avoidant behavior and, thus, maintains child anxiety symptoms (Lebowitz, 2019), at the core of its treatment focus. Initial research suggests the intervention is effective at reducing family accommodation across a host of anxiety disorders (Lebowitz et al., 2020). However, accessibility may still be a barrier to its use. Therefore, the following hypotheses were proposed utilizing a 6-week online group parent training workshop based on the SPACE protocol:

H1. Participants in the intervention condition (i.e., parent training workshop) would report a greater decrease in family accommodation at Time 2 relative to Time 1, as compared to the waitlist control condition.
Further, it is widely accepted that SM is a rare disorder and often requires adaptations within interventions (Østergaard, 2018). Given this was the first study to formally assess a modified version of the SPACE protocol with a sample of parents whose children have SM symptoms specifically, the following hypothesis was proposed:

H2. Participants in the intervention condition (i.e., parent training workshop) would report a greater decrease in family accommodation of selective mutism at Time 2 relative to Time 1, as compared to the waitlist control condition.

In addition to the primary treatment targets of reducing family accommodation, research has found secondary benefits for parents as well. Specifically, Lebowitz et al. (2020) found parents reported a significant decrease in parenting stress from pre-intervention to post-intervention. Thus, a similar pattern was expected for parenting stress levels and the following hypothesis was proposed:

H3. Participants in the intervention (i.e., parent training workshop) condition would report a greater decrease in parenting stress at Time 2 relative to Time 1, as compared to the waitlist control condition.

Research suggests that many children who have anxiety also have a parent that experiences anxiety (Eley et al., 2015; Lebowitz et al., 2016). Similar to parenting stress, initial research has indicated SPACE may decrease parents’ anxiety levels as well. For example, while non-significant, Lebowitz et al. (2014a) found that parents reported reduced anxiety symptoms in themselves from pre- to post-intervention. Therefore, the following hypothesis was proposed:

H4. Participants in the intervention condition (i.e., parent training workshop) would report a greater decrease in parent anxiety symptoms at Time 2 relative to Time 1, as compared to the waitlist control condition.
Although the SPACE protocol targets parent behaviors, initial research efforts indicate the parent-based intervention has resulted in decreased anxiety symptoms in children, measured broadly (Lebowitz et al., 2014a, 2020), as well as social anxiety disorder symptoms specifically via a clinical case illustration (Lebowitz & Majdick, 2020). As such, similar findings were expected for the current study with parents of children with SM. Therefore, the following hypothesis was proposed:

H5. Participants in the intervention condition (i.e., parent training workshop) would report a greater decrease in child anxiety symptoms at Time 2 relative to Time 1, as compared to the waitlist control condition.

Further, although anxiety is not formally included in diagnostic criteria for SM (APA, 2013), anxiety symptoms are highly comorbid with the primary feature of SM (i.e., failure to speak in certain situations despite readily speaking in others; Driessen et al., 2020). As such, a similar pattern to that of anxiety symptoms was expected for verbal behaviors and the following hypothesis was proposed:

H6. Participants in the intervention condition (i.e., parent training workshop) would report a greater increase in child verbal behaviors at Time 2 relative to Time 1, as compared to the waitlist control condition.

Mild oppositionality is a temperament construct that has been associated with SM (Cohan et al., 2008); however, findings regarding this association have been mixed (Muris & Ollendick, 2015). While addressing disruptive behaviors is not a primary treatment goal for the SPACE program, the intervention acknowledges disruptive behaviors, particularly when parents are no longer engaging in accommodating behaviors, and integrates skills to address these concerns (Lebowitz & Omer, 2013). Therefore, the following research question was proposed:
Research Question 1. Would participants in the intervention condition (i.e., parent training workshop) report a greater decrease in child disruptive behaviors at Time 2 relative to Time 1, as compared to the waitlist control condition?
A power analysis using G*Power (Faul et al., 2007, 2009) indicated 54 was the needed sample size to detect small effects (i.e., .25) for the current study’s statistical analyses (i.e., repeated measures ANOVA, within-between interaction with 2 groups and 2 measurements). In the spring of 2022, the current study recruited individuals living in the United States (n = 56) who reported they were a parent of at least one child ages 5-12 with symptoms of selective mutism (i.e., difficulty speaking in at least one setting despite speaking in other settings, resulting in functional impairment) and living with them in the same home (see Figure 1). Parents were also required to be 18 years or older and fluent in the English language. The screening questionnaire was completed through Qualtrics, an online survey development website. A total of 108 individuals completed the screener survey. Based on responses to screener items, 31 individuals were identified as ineligible to participate in the study due to child requirements (e.g., age, co-morbidities of autism spectrum disorder, intellectual disability, other difficulties that interfere more than SM symptoms, SM symptoms do not cause functional interference; n = 25), parent requirements (e.g., age, English language proficiency; n = 5), or an inability to refrain from intervention or pharmacological changes during the course of the study.
(n = 3). All eligible participants (n = 77) were provided the opportunity to complete informed consent (see Appendix A).

Figure 1. Participants enrolled in each phase of the current study.

Of the 77 individuals who were provided the opportunity to participate, a total of 56 individuals completed informed consent and were randomly assigned via a random number generator to participate in the workshop condition or the waitlist control condition (n = 28 for each condition). Of the 56 individuals who provided informed consent, 54 participants completed
T1 measures \( (n = 27 \text{ for each condition}) \). All participants in the control condition completed T2 measures. Participants in the workshop condition were required to attend at least four out of six of the Supportive Parenting for Selective Mutism workshop sessions in order to be eligible for T2 measures. One participant in the workshop condition voluntarily withdrew from the study following the second session due to changes in their child’s psychotropic medication, which brought the total sample to 53 participants and workshop condition to 26 participants. All participants in the workshop condition attended at least four of six sessions (i.e., 88.5% \( [n = 23] \) attended six sessions, 1% \( [n = 2] \) attended five sessions, 0.5% \( [n = 1] \) attended four sessions). All eligible participants in the intervention condition completed T2 measures. See Figure 1 for a streamlined version of the sample size during each phase of the current study.

A total of 53 participants were in the final sample that was utilized for the main analyses. Most of the participants identified as female (98%; 2% male) and White (77.4%; 10% Black or African American, 6% Multiracial, 4% Hispanic or Latinx, 2% Asian, and 2% Native Hawaiian or other Pacific Islander). Participants’ age ranged from 30-62 years \( (M = 40.34, SD = 5.66) \). Regarding relationship status, the majority of participants identified as married or cohabitating with a partner (92%; 6% dating/single, 2% divorced/separated). Additionally, most participants identified as completing a 2-year or 4-year college degree (47%; 36% completed graduate or professional degree, 17% attempted some college but did not complete a college degree) and as employed (74%; 53% employed full-time and 21% employed part-time). Those who were employed worked for a range of 5 to 55 hours per week \( (M = 37.37, SD = 9.77) \). There was a wide range of household incomes based on participants selecting their average yearly household income within a specified range (2% less than $15,000, 14% between $15-50,000, 36% between
$51-90,000, 26% between $91-150,000, 22% more than $151,000). Participant’s households ranged from 3-7 people living in the home ($M = 4.30, SD = 0.89$).

In addition to providing demographic information on themselves, participants provided demographic information on their child with SM symptoms. Children had an average age of 7.79 years ($SD = 2.13$). Approximately 60% of children were identified as female, whereas 40% were identified as male. The majority of children were identified as White (66%; 17% Multiracial, 8% Black or African American, 6% Hispanic or Latinx, and 4% Asian). Children’s grade level ranges from pre-kindergarten/kindergarten to seventh grade (28% were in pre-kindergarten or kindergarten, 11% were in first grade, 19% were in second grade, 6% were in third grade, 11% were in fourth grade, 17% were in fifth grade, 6% were in sixth grade, and 2% were in seventh grade). Parents reported that 77% of the children had received a formal diagnosis of SM. Further, 45% of children had a comorbid diagnosis. The most common comorbid diagnosis was an additional anxiety disorder diagnosis (e.g., social anxiety: $n = 8$, generalized anxiety disorder: $n = 6$; separation anxiety disorder: $n = 3$). Additionally, children had comorbid difficulties in including developmental delays such as speech ($n = 2$), learning disorders ($n = 2$), attention-deficit/hyperactivity disorder (ADHD; $n = 1$), depression ($n = 1$), emotional disturbance ($n = 1$), and medical issues (e.g., type 1 diabetes, pediatric acute-onset neuropsychiatric syndrome [PANS], epilepsy, Duchenne muscular dystrophy, and asthma; $n = 5$). The vast majority (83%) of the children in the current sample had received some type of therapeutic intervention in the past. Of these individuals, 75% reported interventions targeting symptoms of SM. Currently, 53% of the children were in therapy. Of these individuals, 89% of children’s interventions were targeting SM symptoms. Additionally, 28% of children were reported to have been prescribed psychotropic medication in the past. Of these individuals, 93% of children’s medication was
prescribed to target anxiety symptoms. Approximately 25% of children were reported to currently be prescribed psychotropic medication, the majority of which was to target anxiety symptoms (i.e., 92%). The majority of children were reported to have services in the school setting (60%; 34% have an Individualized Education Plan [IEP] and 26% have a 504 Plan). Additionally, most children were reported to be in regular education classrooms (76%).

Procedure

Participants were recruited across the United States through an electronic flyer that was posted to a professional organization’s website (i.e., Selective Mutism Association) and distributed via email listserv to clinicians and parents, as well as shared with the organization’s special interest groups on social media (i.e., Facebook). The flyer directed individuals to complete a screening survey (see Appendix B) or contact the principal investigator for additional information. Once an available group time had 10-12 eligible participants that completed informed consent, participants were randomly assigned to the workshop group or waitlist control group. Those who were assigned to the workshop group were provided information for the synchronous online workshop (i.e., Zoom link with relevant dates and times) and the waitlist control group were informed of their assignment and were told they would be eligible to participate in the workshop upon completion of the study. The current study had five cohorts that occurred simultaneously with five to six participants each. Pre-workshop measures (i.e., T1) were distributed to both groups one week prior to the start of the workshop and participants were reminded to complete the measures within a one week time frame. All participants completed the same battery of measures, which assessed demographic information, family accommodation,
parenting stress, parent anxiety, child anxiety, child verbal behaviors, and child disruptive behaviors.

During the workshop, participants were offered multiple options if they were unable to attend their assigned session (e.g., due to personal or family emergency). Out of the 26 participants who completed the workshop, six assigned sessions were missed among 156 attendance checks. Four participants missed one session, and one participant missed two sessions. To learn the material covered in the assigned session that was missed, participants either completed the session with a different cohort that week \( (n = 2) \), briefly reviewed the information at the next session \( (n = 1) \), or had a brief 15-minute phone call with the primary facilitator prior to the next session \( (n = 1) \). Material was not covered for two missed sessions, as these occurred during the final session.

Upon completion of the sixth and final workshop session, post-intervention measures (i.e., T2) were sent to all participants. Those in the workshop condition completed additional measures specific to the workshop evaluation. In order for participants in the workshop condition to be eligible for T2, participants were required to attend four of six sessions. Similar to T1, participants were reminded to complete the T2 measures within one week. Upon completion of the study, participants were debriefed, and provided with additional SM resources and contact information for mental health providers in their respective areas. Participants were paid $15 after completion of T1 and $25 after completion of T2. In addition, 18 of 27 parents in the waitlist control group took the opportunity to participate in the workshop during the summer of 2022. No assessments were completed related to the waitlist control group participating in the workshop.
**Intervention Condition**

In the current study, a 6-week parent training workshop informed by the Supportive Parenting for Anxious Childhood Emotions (SPACE; Lebowitz & Omer, 2013) protocol was delivered by two co-facilitators via synchronous videoconferencing in a group format (i.e., five cohorts of 5-6 parents per group). The primary facilitator, who was present for each workshop session, was a doctoral candidate clinician who completed SPACE training and had eight years of training and experience with children with SM. Co-facilitators included doctoral graduate students who completed SM training and had experience providing parent interventions and exposure-based therapies. Sessions were 90 minutes each and informed by six of the eight SPACE standard treatment parts (i.e., participants targeted one accommodating behavior compared to two). Further, two of the optional and flexible treatment modules focused on coping with disruptive behavior and accessing support were incorporated into Session 3 and 5, respectively. These optional modules were selected to be incorporated given they are most frequently implemented in individual SPACE interventions (Lebowitz et al., 2014a). Each session was recorded to monitor treatment integrity. Participants were sent a reminder via text or email to complete homework three days after each session (i.e., Sessions 1-5) in addition to a reminder about the next session on the day prior to the session.

Each workshop session followed a similar structure and built on one another. Sessions began with a review of the prior week’s materials. Participants then completed a brief survey assessing homework completion and engaged in a group check in. Next, participants received psychoeducation and/or participated in relevant activities. Activities that occurred in breakout rooms had a ratio of one facilitator to 2-3 participants, which allowed for more individualized
work and feedback. Participants were randomly assigned to breakout rooms each time they occurred to receive feedback from each facilitator and allow participants to learn from each group member. At the end of the session, homework for the following week was reviewed and participants had the opportunity to ask additional questions. Following each workshop, materials were electronically provided to participants. Additionally, a copy of individualized activities completed during particular sessions were emailed to participants (see below).

As described by Lebowitz & Omer (2013), the first parent training workshop session focused on defining goals for treatment and creating a context for the intervention. Specifically, participants were informed that the intervention is aimed at treating their child through work with parents, while explaining the rationale for parent interventions. Additionally, multiple concepts were introduced including anxiety, selective mutism, personal boundaries, and support. Participants completed an activity in breakout rooms to generate supportive statements. For homework, prior to Session 2, participants were asked to write down one or two things that they would like to see their child handle better, such as things they have been avoiding (i.e., situations, questions) in an effort to identify situations in which parental accommodation is most likely to occur.

Session 2 had two primary components. First, participants were introduced to the concept of accommodation and the rationale for addressing it. Participants learned how accommodation can take various forms (i.e., related to many different types of anxiety, and specifically SM). Participants also completed an activity in breakout rooms in which they assessed their current levels of support and accommodation. Second, tracking of accommodations was introduced. Based on Lebowitz and Omer (2013), participants were presented with a detailed accommodation chart that includes numerous time points throughout the day that
accommodation may occur. A preliminary chart was completed by each participant during the session in breakout rooms. For homework, participants charted accommodations each day until the next session. They also identified one SM-specific accommodation to target in future sessions that they felt limited their child’s independent functioning most.

Session 3 also consisted of two primary parts. The session began by reviewing the accommodation chart and identifying what target problem participants felt was most important in a breakout group. The second part of the session focused on how participants inform the child of the parent-led process. Specifically, it discussed the content of the announcement (i.e., parents informing children of changes in their own behavior compared to a discussion eliciting the child’s feedback) and different ways in which it can be presented to their child. Participants began drafting their written announcement in breakout groups. Typical child responses (e.g., indifference, ignoring, aggressive behavior, distress) were reviewed to prepare participants and inform them of the importance of sticking to the treatment plan. Components of the module “Dealing with Extreme Disruptive Behavior” were incorporated such that participants learned how to effectively handle their child’s disruptive behaviors (i.e., minor to extreme behaviors), which can occur following the written announcement. Following the session, each participant was emailed their target accommodation. Intersession goals included finalizing the written announcement, informing the child of the parent-intervention, reflecting on their own feelings before, during, and after the announcement, and continuing to chart accommodation of the specific target behavior.

Session 4 focused on formulating a plan to address the accommodating behavior. First, participants shared their experience of the announcement. Then, participants created a clear behavioral plan within breakout rooms that focused on changes parents would make to their own
behavior. These changes were related to the target problem and usually involved the reduction of accommodating behaviors, but can also include steps to resist avoidance on the part of children. For example, a common plan to address the target accommodation of speaking for the child included waiting a specified amount of time and re-prompting and/or rephrasing the question (i.e., open-ended question to forced-choice question). Depending on parents’ preference and the child’s SM severity level, families implemented this plan across settings or during specific tasks (e.g., while running errands at a specified store three times per week). Additional examples of targeted accommodations were not whispering or bending down to the child in public settings, and no longer avoiding taking the child to public places. Children’s reactions to decreased accommodation by participants were addressed. Following the session, each participant was emailed their behavioral plan to reduce accommodation. Intersession goals included implementation and adherence to the plan formulated in the session, and continuation of charting accommodation of the target behavior.

Session 5 continued focusing on implementing, monitoring, and modifying the plan to reduce parental accommodation to the child’s SM symptoms. Specifically, participants reviewed the past week including changes in their accommodation behaviors and their child’s reactions and modified behavioral plans as necessary (e.g., problem-solve any difficulties that occurred, further reduce level of accommodation). Additionally, the use of reinforcement for their child was introduced to be used when the child displayed a positive behavior (e.g., talking to someone) or copes with anxiety. Components of the optional module “Recruiting and Engaging Supporters” was incorporated such that participants learned the rationale for supporters and the roles supporters can fulfill. Intersession goals included identifying a list of potential supporters
and repeating the same goals as the previous session (i.e., implementation and adherence to the behavioral plan and track family accommodation for the target behavior).

Session 6 served as a summary and termination session. Similar to the previous session, participants had the opportunity to problem-solve any difficulties that occurred. Participants also reviewed changes in their child’s anxiety and SM symptoms (i.e., targeted and nontargeted behaviors), and changes in parental attitudes and skills. Further, parents identified additional goals they would like to achieve. Finally, the session closed by discussing the maintenance of progress and dealing with future exacerbations of symptoms.

An integrity check was conducted (see Appendix L) by a non-biased individual via reviewing videos of each workshop to ensure content was consistent across groups. A range of elements were checked for each session (i.e. Session 1 = 16 elements, Session 2 = 12 elements, Session 3 = 19 elements, Session 4 = 11 elements, Session 5 = 14 elements, Session 6 = 12 elements). Results indicated that 100% of elements were present across groups which suggests expectations for integrity were met. Due to technological issues, recordings for two of the thirty sessions began a few minutes after initial content was reviewed. This resulted in one of 80 (0.01%) integrity check items not able to be reviewed during Week 1, and one of 95 (0.01%) integrity check items not able to be reviewed during Week 3.

Measures

Demographic Information

Participants completed a series of demographic items (see Appendix C) including information about their age, gender, racial identity, socioeconomic status including employment status and education, and other individuals in the household (e.g., number of individuals in the
home, their roles, age, grade if applicable, racial identity, gender, relationship to the participant). Given the current study targeted parents of children with symptoms of SM, specific information was asked about the child’s SM history (i.e., age at which child was diagnosed, provider type that gave diagnosis, history of interventions utilized, classroom type, services in the school) and use of current pharmacological or psychosocial interventions.

**Parental Family Accommodation**

Family accommodation was measured using the Family Accommodation Scale -Anxiety (FAS-A; Lebowitz et al., 2013; See Appendix D). The FAS-A is a 9-item self-report questionnaire that assesses family accommodation behaviors as a result of child anxiety in the past month. Items are rated on a 5-point scale to assess the frequency of accommodating behaviors (i.e., 0 = Never, 1 = 1-3 Time a Month, 2 = 1-2 Times a Week, 3 = 3-6 Times a Week, 4 = Daily). All items are summed to create a total score ranging from 0-36, with higher scores indicating greater levels of accommodating behavior.

Research has found that the FAS-A is a valid and reliable measure. Specifically, Lebowitz et al. (2013, 2019) conducted exploratory and confirmatory factor analyses that identified two factors: Participation (e.g., “How often did you participate in behaviors related to your child’s anxiety?”), “How often did you assist your child in avoiding things that might make them more anxious?”) and Modification (e.g., “Have you modified your work schedule because of your child’s anxiety?”, “Have you modified your leisure activities because of your child’s anxiety?”). Multiple studies have also demonstrated the FAS-A total score has excellent internal consistency (Cronbach’s alpha = .88-.91; Lebowitz et al., 2013, 2015b, 2019). Further, the FAS-A had good test-retest reliability over an average of 10 days (r = .79; Lebowitz et al., 2019).
Research has also demonstrated convergent validity as the FAS-A was significantly correlated to the Screen for Child Anxiety Related Emotions Disorder (SCARED; Birmaher et al., 1999), parent ratings of the Multidimensional Anxiety Scale for Children, 2nd Edition (MASC-2; March, 2013), and the Parenting Stress Index – Short Form (PSI-SF; Abidin, 1995) (Lebowitz et al., 2013, 2019). Similarly, divergent validity was found as the FAS-A was not correlated with measures of depression, including the Mood and Feelings Questionnaire (MFQ; Angold & Costello, 1987) and the Children’s Depression Inventory (CDI; Kovacs, 1992). Overall, the FAS-A has been found to be a psychometrically sound measure for family accommodation. In the current study, the FAS-A total score demonstrated good internal consistency (T1 $\alpha = .89$; T2 $\alpha = .88$).

Additionally, given that preliminary research suggests that the FAS-A does not fully capture family accommodations specific to children with SM (Fisher, 2021), further items were included to more comprehensively assess potential change. Items were determined by reviewing examples of accommodation included in the SPACE training materials and selecting items pertaining to children’s avoidance of settings or situations in which speaking may be expected (e.g., school, school transportation, public settings; “Picked up my child from school early,” “Let my child avoid social engagements,” “Answered questions directed to my child”) or in which the parent modifies their behavior so the child is not left alone when they would be less likely to communicate if needed (e.g., “Parent stayed home from work,” “Parent came home early from an outing”). Further, consultation with an SM expert led to additional items targeting participation in common SM behaviors (e.g., “Whispered in social settings with my child,” “Bent down to my child’s level when my child was communicating with me,” “Discussed with my child how other people do not understand the child [e.g., do not ask questions in the right way]”).
See Appendix D for items included. Items were rated on 4-point scale similar to the FAS-A scale to assess the frequency of accommodating behaviors of SM (i.e., 0 = Never, 1 = 1-2 Times a Week, 2 = 3-6 Times a Week, 3 = Daily). The fifth frequency point on the FAS-A scale (i.e., 1-3 Times a Month) was removed due to the abbreviated nature of the intervention. Items are summed to create a total score ranging from 0-60, in which higher scores indicate greater levels of accommodating behavior specific to SM. Because the items were created for the current study, no psychometric previous properties are available. In the current study, the total score demonstrated good internal consistency (T1 $\alpha = .80$; T2 $\alpha = .84$).

**Parenting Stress**

Parenting stress was measured using the Parental Stress Scale (PSS; Berry & Jones, 1995; See Appendix E). The PSS is an 18-item, self-report questionnaire that asks participants to rate positive (e.g., “I feel close to my children,” “Having children gives me a more optimistic view for the future”) and negative (e.g., “Caring for my children sometimes takes more energy than I have to give,” “Having children leaves little time and flexibility in my life”) statements associated with parenting. Items use a 5-point Likert-scale to assess the extent to which they agree with statements describing their experience as a parent and relationship with their child (i.e., 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree). The responses for positively-worded items (i.e., items 1, 2, 5, 6, 7, 8, 17, and 18) were reverse coded. Then, all items were summed to create a total score ranging from 18 to 90 with higher scores indicative of greater parenting stress.

The PSS has demonstrated adequate reliability and validity with participants in parents with children ages two to 18 (Berry & Jones, 1995; Gavita et al., 2014; Shapiro, 2014).
Specifically, research has found the PSS has good internal consistency with Cronbach’s alpha ranging from .83 to .86 (Berry & Jones, 1995; Gavita et al., 2014; Shapiro, 2014). Additionally, the PSS demonstrated good test-retest reliability (i.e., $r = .81$) over a 6-week period which suggests the measure is stable over time (Berry & Jones, 1995). The PSS has also been able to differentiate between clinical (i.e., mothers with children who are receiving treatment) and non-clinical samples with mothers in the clinical sample reporting higher levels of parenting stress (Berry & Jones, 1995). Further, the PSS has been compared with the Parenting Stress Index (PSI; Abidin, 1986) which is a widely used and psychometrically sound measure. Results indicated the PSS was positively correlated with the PSI across domains (i.e., $r_{\text{total}} = .75$, $r_{\text{child}} = .62$, $r_{\text{parent}} = .72$; Berry & Jones, 1995). Collectively, evidence supports the PSS as a psychometrically sound measure to assess parenting stress. In the current study, the PSS total score demonstrated good internal consistency ($T1 \alpha = .84$; $T2 \alpha = .87$).

**Parent Anxiety**

Parent anxiety was measured using the Anxiety Subscale of the Short-Form version of the Depression Anxiety Stress Scales (DASS-21; Antony et al., 1998; see Appendix F). The Anxiety Subscale of the DASS-21 is a 7-item self-report questionnaire that assesses both psychological arousal and cognitive, subjective symptoms of anxiety (e.g., “I experienced trembling,” “I was worried about situations in which I might panic and make a fool of myself”). Items use a 4-point scale to assess the frequency at which each item occurred over the past week (i.e., 0 = *Did not apply to me at all*, 1 = *Applied to me to some degree, or some of the time*, 2 = *Applied to me a considerable degree, or a good part of the time*, 3 = *Applied to me very much, or*
most of the time). Items specific to the Anxiety Subscale were summed and then multiplied by two, ranging from 0 to 42, with higher scores indicative of a more severe anxiety presentation.

All subscales of the DASS-21, including the Anxiety, Depression, and Stress Subscales, are considered psychometrically sound for use with adults across many populations (e.g., Norton, 2007). Factor analyses of the original DASS support a three-factor structure (Lovibond & Lovibond, 1995). Additionally, this factor structure was found to be appropriate via exploratory and confirmatory factor analysis of the short form (Antony et al., 1998; Henry & Crawford, 2005; Norton, 2007). Multiple studies have demonstrated adequate to excellent internal consistency for the Anxiety subscale across populations (Cronbach’s alpha = .78-.92; Antony et al., 1998; Henry & Crawford, 2005; Norton, 2007). Construct validity was demonstrated with associations in the expected direction between the DASS-21 and the Positive and Negative Affect Schedule (Henry & Crawford, 2005). Specifically, there were negative associations between DASS-21 subscales and positive affect and positive associations between DASS-21 subscales and negative affect (Henry & Crawford, 2005; Norton, 2007). Further, convergent validity was established as the DASS-21 Anxiety subscale had significant correlations with the Beck Anxiety Inventory (BAI; Beck & Steer, 1990), the State-Trait Anxiety Inventory (STAI-T; Spielberger, 1983), the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983), and the Personal Disturbance Scale (PDS; Bedford & Foulds, 1978) (Antony et al., 1998; Henry & Crawford, 2005; Norton, 2007). The DASS-21 has also been found to discriminate between patients with clinical levels of anxiety and depression and people without a clinical diagnosis (Antony et al., 1998). Thus, the DASS-21, and specifically the Anxiety Subscale, has been deemed a valid and reliable measure to examine symptoms of anxiety. In the current study,
the DASS-21 anxiety subscale demonstrated adequate internal consistency (T1 \( \alpha = .71 \); T2 \( \alpha = .78 \)).

**Child Anxiety**

Children’s anxiety symptoms were measured using the Spence Children’s Anxiety Scale for Parents (SCAS-P; Spence, 1998; see Appendix G). The SCAS-P is a 38-item parent-report questionnaire of children’s anxiety symptoms based on anxiety disorder classification in the DSM-IV. There are six different anxiety classifications assessed in the SCAS-P: (1) separation anxiety disorder; (2) social phobia (i.e., social anxiety disorder); (3) obsessive-compulsive disorder; (4) panic and agoraphobia; (5) physical injury fears in lieu specific phobias; and (6) generalized anxiety. Further, all subscales load on to a higher-order factor defined as total anxiety, which will be used in this study. Items use a 4-point scale to assess the general frequency of each anxiety symptom (i.e., 0 = *Never*, 1 = *Sometimes*, 2 = *Often*, 3 = *Always*). All anxiety items were summed to create the total anxiety score where higher scores are indicative of greater anxiety.

The SCAS-P has demonstrated adequate reliability and validity with participants in the proposed age-range. Similar to the child report version, from which the measure is created, factor analyses identified six correlated factors (Nauta et al., 2004). In the parent-report version, the higher order factor of anxiety was unable to be assessed properly due to high intercorrelations between factors and the higher-order factor (Arendt et al., 2014; Nauta et al, 2004). However, the child-report with the same structure has demonstrated an appropriate model fit with six first-order factors that load onto the higher-order factor (Muris et al., 2000; Spence, 1997, 1998; Spence et al., 2003). Research has demonstrated good internal consistency in children with and
without a clinical disorder across many cultural backgrounds (Cronbach’s alpha = .85-.92; Arendt et al., 2014; Li et al., 2016; Nauta et al, 2004). The SCAS-P has also demonstrated adequate test-retest reliability over a 2-week and 3-month period ($r = .81-.88$; Arendt et al., 2014). Convergent validity was established given the SCAS-P has been significantly correlated with multiple measures of anxiety, including the internalizing scale of the Child Behavior Checklist (CBCL; Achenbach, 1991), the anxiety subscale of the Beck Youth Inventory (BYI; Beck et al, 2001), and the internalizing subscale of the Strength and Difficulty Questionnaire (SDQ; Goodman et al., 1998). Further, the SCAS-P was also correlated, but to a much lesser extent, with the depression subscale of the BYI and the externalizing subscale of the CBCL and SDQ, which demonstrates divergent validity (Arendt et al., 2014; Nauta et al., 2004). Finally, Arendt et al. (2014) found the SCAS-P total scale was able to discriminate between children with and without clinical disorders. Collectively, the SCAS-P is a psychometrically sound measure to assess child anxiety symptoms. In the current study, the SCAS-P total score demonstrated good internal consistency (T1 $\alpha = .85$; T2 $\alpha = .89$).

**Child Verbal Behaviors**

Children’s verbal behaviors were measured using the Selective Mutism Questionnaire (SMQ; Bergman et al., 2008; see Appendix H). The SMQ is a 17-item parent-report questionnaire that measures the frequency of the child’s failure to speak across settings over the past two weeks. There are three settings assessed that contribute to three subscales in the SMQ: (1) School (six items), (2) Home/Family (six items), and (3) Public/Social (five items). All subscales load on to a higher-order factor labeled “Total Scale” which was used in the present study. Items use a 4-point scale to assess the general frequency of each anxiety symptom (i.e., 0
= Never, 1 = Seldom, 2 = Often, 3 = Always). The total score was calculated by computing the mean of relevant items, where higher scores are indicative of more frequent verbal behaviors. Thus, lower scores are representative of greater SM symptoms. Of note, one item was inadvertently missing from the Home/Family subscale; thus, the current measure is based on the mean of 16 items.

The SMQ has demonstrated adequate psychometric properties. Factor analysis indicated a three-factor solution was most appropriate in order to maximize clinical utility, conceptual utility, and interpretability (Bergman et al. 2008; Letamendi et al., 2008). Further, research has found that the total scale demonstrated good internal consistency (Cronbach’s alpha = .78-.97; Bergmen et al., 2008; Letamendi et al. 2008). The SMQ was able to discriminate between SM and non-SM or typically-developing children (Bergmen et al., 2008; Oerbeck et al., 2020). Additionally, given SM and social anxiety are highly comorbid (Driessen et al., 2020), convergent validity was established given the SMQ total scale was significantly correlated with Social Anxiety Scale for Children - Revised (SASC-R; La Greca & Stone, 1993), the social anxiety subscale of the Multidimensional Anxiety Scale for Children - Parent (MASC-P; March et al., 1997), and the clinical severity rating from the Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV; Silverman & Albano, 1996). Similarly, Letamendi et al. (2008) found the SMQ global score was significantly correlated with the ADIS-IV Clinician Severity Rating for SM). The SMQ was not significantly correlated with the harm avoidance, separation anxiety, and physical symptoms of the MASC-P, which supports adequate divergent validity (Bergmen et al., 2008). Incremental validity was also established by Letamendi et al. (2008). Specifically, the SMQ added significant variance in the prediction of SM above and beyond the Anxious/Depressed subscale of the Child Behavioral Checklist/1.5-5 and 6-18 – Parent Report
Form (CBCL; Achenbach & Edelbrock, 1991). Overall, the SMQ serves as the most widely used standardized instrument for SM symptoms and is deemed appropriate to assess baseline SM symptoms and treatment effects (Oerbeck et al., 2020). In the current study, the SMQ total score demonstrated adequate internal consistency (T1 $\alpha = .75$; T2 $\alpha = .70$).

**Child Disruptive Behaviors**

Disruptive behaviors were measured using the Externalizing Subscale of the Behavior and Feelings Survey (BFS; Weisz et al., 2019; See Appendix I). This subscale of the BFS is a 6-item parent-report questionnaire that assesses the severity of various externalizing behaviors (e.g., “Refusing to do what adults tell them to do,” “Arguing with people”) over the past week. Items were rated on a 5-point scale (i.e., 0 = *Not a problem*, 4 = *A very big problem*). Items specific to the subscale were summed, ranging from 0-24, with higher scores indicative of more behavioral issues.

Although the BFS is a relatively new measure, initial research suggests it is psychometrically sound (Weisz et al., 2019). Original items were determined by interviewing parents and children in treatment. Items were then eliminated if they were not specific to psychopathology, internalizing and externalizing concerns (i.e., determined by comparison to youth psychopathology reviews, factor analyses, or meta-analyses), and if they were not reported by both parent and child. This process produced 48 items, 20 of which were specific to externalizing difficulties. A number of studies were carried out, including factor analyses and item response theory analyses that eliminated items with poor fit. This resulted in the final 12-item questionnaire which has two primary factors (i.e., externalizing symptoms, internalizing symptoms). The externalizing subscale has demonstrated excellent internal consistency (i.e.,
Cronbach’s alpha = .93-.94; Weisz et al., 2019). Additionally, the externalizing subscale was significantly correlated with the externalizing subscale of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001); DSM criteria for Oppositional Defiant Disorder and Conduct Disorder (APA, 2013), multiple subscales from the Youth Outcome Questionnaire (YOQ; Burlingame et al., 2001; i.e., interpersonal relations, social problems, and behavioral dysfunction), and the conduct problems subscale from the Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001) which is indicative of convergent validity. Further, the BFS was not related to the internalizing subscale of the CBCL, the DSM criteria for Affective Problems and Anxiety, the somatic subscale of the YOQ, or the emotional symptoms subscale of the SDQ, which indicates discriminant validity from internalizing scales (Weisz et al., 2019). Finally, the BFS also had strong test-retest reliability over a one-week period (r = .79; Weisz et al., 2019). Overall, the BFS appears to be a valid and reliable measure to use to assess externalizing behaviors. In the current study, the BFS externalizing scale demonstrated good internal consistency (T1 α = .86; T2 α = .87).

Evaluation of the Parent Training Workshop

Given that the current study is evaluating a parent training workshop based on the SPACE intervention in an online, group format for the first time, it is important to evaluate parents’ feelings about the workshop. Acceptability of the workshop was measured using the Treatment Evaluation Inventory – Short Form (TEI-sf; Kelley et al., 1989; see Appendix J). The TEI-sf is a 9-item self-report questionnaire that measures parent’s acceptance of procedures used in interventions. Each item is rated on a 5-point Likert scale (i.e., 1 = Strongly Disagree, 5 = Strongly Agree). Once an item is reverse coded (i.e., Item 6), all items are summed to determine
a total acceptability score, ranging from 9 to 45, where higher scores represent higher acceptability. While the scale was initially developed for use with parents of children with behavior problems, the scale has been used to assess interventions for many presenting problems, including anxiety-related disorders (e.g., Twohig et al., 2006), given its focus on acceptability of interventions broadly.

The TEI-sf has demonstrated good adequate reliability and validity. Factor analyses indicated a two-factor solution (i.e., Acceptability and Discomfort; Kelley et al., 1989). Further, research has found that the total scale has demonstrated good internal consistency (Cronbach’s alpha = .85; Kelley et al., 1989). The TEI-sf has also demonstrated the ability to discriminate acceptability between various treatment types in the expected direction (e.g., positive reinforcement and response cost [i.e., privilege revoked as consequence] were rated as significantly more acceptable than time out and spanking was rated significantly lower than all other treatment options including positive reinforcement, response cost, time-out, differential attention [i.e., praise and attention for good behaviors while actively ignoring disruptive behaviors], and overcorrection [i.e., practicing following directions whenever child disobeys]; Jones et al., 1998; Kelley et al., 1989; Spirrison & Noland, 1991). Collectively, the TEI-sf is an appropriate measure to evaluate acceptability of the parent training workshop. In the current study, the TEI-sf total score demonstrated adequate internal consistency (T2 α = .79).

In addition to the TEI-sf, a more specific evaluation was conducted using a 10-item self-report questionnaire (see Appendix K). Questions asked parents in the parent training workshop group how meaningful the workshop was to them (e.g., “Do you feel you got something of lasting value of importance as a result of taking the training?”, “Is it your intention to keep on practicing to be conscious in daily parenting life?”) as well as more specific skills. Further,
questions asked parents to evaluate the format and modality of the workshop (e.g., “How satisfied are you with the amount of help you received in the group setting?”). Because this is being used as an evaluation measure, there was no composite scales previously created and thus, no psychometric properties are available. Items were used descriptively to report how much parents learned, utilized the skills from the intervention, and valued the format and modality of the workshop.
CHAPTER 3
RESULTS

Preliminary Analyses

Prior to primary analyses, preliminary analyses were conducted to survey the data. To account for item-level missing data, missing items were imputed with group means if 70% of scale items were present. After imputing item-level missing data, there were minimal missing data on the scale level. Two participants were missing only the SMQ because they did not complete the questionnaire or were homeschooled and could not respond to items related to the school domain. Thus, the sample size for analyses related to verbal behaviors (i.e., the use of the SMQ) have two fewer participants included in the sample size. Outliers were identified and corrected based on a procedure outlined by Tabachnick and Fidell (2013) which involves examining z-scores and identifying values that fall above the absolute value of 3.29 as outliers. The identified outlier value was corrected by changing the value to the next highest non-outlier value. An outlier was identified within the following variable: T2 Parent Anxiety \( (n = 1) \). This correction changed the mean of T2 Parent Anxiety from 4.60 to 4.38. Normality of the data was assessed to determine if variables had appropriate ranges and acceptable values of skewness (i.e., between -2 and 2; George & Mallery, 2010). The composite variable for the T2 Family Accommodation of Selective Mutism (FASM) revealed non-normal distributions due to leptokurtic data (i.e., kurtotic data with absolute values greater than 2.00). Tabachnick and Fidell
(2013) suggest various transformations to correct for non-normal kurtosis. As such, T1 and T2 FASM were transformed by taking the square root.

To determine if there were differences among demographic variables between the workshop and control conditions, *t*-tests for continuous demographic variables (Table 1) and \(\chi^2\) tests of categorical demographic variables (Table 2) were conducted. If \(\chi^2\) assumptions were not met (i.e., expected values of 10 for 2x2 design, expected values of 5 for designs larger than 2x2), appropriate alternative variables were evaluated (i.e., Fischer’s Exact Test for 2x2 design, Likelihood Ratio for designs larger than 2x2; Fields, 2018). As reported in Table 1 and 2, there were no differences in continuous or categorical demographic variables between the workshop and control conditions for the final sample included in the current study’s analyses. Additionally, there were no differences among ongoing pharmacological or psychosocial interventions between the groups. This indicates participants were similar across conditions.

Descriptive statistics for T1 and T2 outcome variables are presented in Table 3. Participants’ children’s mean scores for Spence Anxiety Total scale are consistent with children that have anxiety disorders (Nauta et al., 2004), suggesting the current sample of children is clinical. Similarly, children’s mean scores on the total scale of the Selective Mutism Questionnaire are consistent with children with SM in other treatment studies (Bergman et al., 2013; Catchpole et al., 2019; Cornacchio et al., 2019; Klein et al., 2017; Lang et al., 2016; Oerbeck et al., 2014, 2020). Based on clinical categories suggested by the authors (Antony et al., 1998), the mean score for the participants' anxiety subscale of the DASS-21 fall in the normal range (71% in normal range; 11% in mild range; 13% in moderate range; 4% in severe range), suggesting that overall the parents are a non-clinical sample. Further, consistent with prior
Table 1

Descriptive Statistics for Continuous Demographic Variables of the Final Sample and by Condition

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Workshop Condition</th>
<th>Control Condition</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M (SD)</td>
<td>n</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Participant Age</td>
<td>53</td>
<td>40.34 (5.66)</td>
<td>26</td>
<td>40.27 (5.29)</td>
</tr>
<tr>
<td>Child Age</td>
<td>53</td>
<td>7.79 (2.13)</td>
<td>26</td>
<td>7.73 (2.01)</td>
</tr>
<tr>
<td>Child Grade</td>
<td>53</td>
<td>2.43 (2.13)</td>
<td>26</td>
<td>2.38 (2.04)</td>
</tr>
<tr>
<td>Number in Home</td>
<td>53</td>
<td>4.30 (0.89)</td>
<td>26</td>
<td>4.19 (0.80)</td>
</tr>
<tr>
<td>Income</td>
<td>53</td>
<td>6.40 (2.05)</td>
<td>26</td>
<td>6.73 (1.85)</td>
</tr>
<tr>
<td>Hours per Week</td>
<td>39</td>
<td>34.96 (10.82)</td>
<td>19</td>
<td>37.37 (9.77)</td>
</tr>
</tbody>
</table>

*Note. Age is presented in years. Income is a categorical variable that was coded on a 1-9 scale where 1 = < $15,000; 4 = $31,000-$50,000; 5 = $51,000-$70,000; 9 ≥$151,000. Hours per Week is the total number of hours participants worked per week if they were employed (i.e., those who reported not working were not included).*
Table 2

Chi-Square Analyses between Categorical Demographic Variables in the Final Sample by Condition

<table>
<thead>
<tr>
<th></th>
<th>Pearson ( \chi^2 ) value</th>
<th>Phi</th>
<th>Likelihood Ratio</th>
<th>( p )-value</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Gender x Condition</td>
<td>--</td>
<td>0.14</td>
<td>--</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Parent Race x Condition</td>
<td>--</td>
<td>0.10</td>
<td>--</td>
<td>0.53</td>
<td>1</td>
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<tr>
<td>Parent Relationship Status x Condition</td>
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<td>-0.14</td>
<td>--</td>
<td>0.61</td>
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<tr>
<td>Parent Education Level x Condition</td>
<td>--</td>
<td>0.04</td>
<td>--</td>
<td>1.00</td>
<td>1</td>
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<tr>
<td>Parent Employment Status x Condition</td>
<td>0.94</td>
<td>--</td>
<td>--</td>
<td>0.62</td>
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<tr>
<td>Child Gender x Condition</td>
<td>0.15</td>
<td>--</td>
<td>--</td>
<td>0.70</td>
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</tr>
<tr>
<td>Child Race x Condition</td>
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<td>0.77</td>
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<tr>
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</table>

*Note.* If assumptions for Chi-Square analyses were violated (expected count < 10 for 2x2 table, expected count < 5 for tables larger than 2x2), Fischer’s Exact Test and Phi (2x2) or the Likelihood Ratio (larger than 2x2) were utilized.
Table 3

Descriptive Statistics for Time 1 and Time 2 Outcome Variables for the Final Sample and Mixed Design Repeated Measures Analysis of Variance Results for Hypotheses 1 through 6 and Research Question 1

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<th>Variable</th>
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<td>M(SD)</td>
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<td>Family Accommodation</td>
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<td>-0.51</td>
<td>13.36 (6.62)</td>
<td>Tx</td>
</tr>
<tr>
<td>Time 1</td>
<td>15.10 (7.64)</td>
<td>0.18</td>
<td>-1.23</td>
<td>14.15 (6.91)</td>
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</tr>
<tr>
<td>Time 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tx X Time</td>
</tr>
<tr>
<td>Family Accommodation of SM</td>
<td>2.43 (0.94)</td>
<td>-0.52</td>
<td>0.46</td>
<td>2.50 (0.85)</td>
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</tr>
<tr>
<td>Time 1</td>
<td>1.83 (0.89)</td>
<td>-0.12</td>
<td>0.01</td>
<td>2.54 (0.86)</td>
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</tr>
<tr>
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<td></td>
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<td>Tx X Time</td>
</tr>
<tr>
<td>Parenting Stress</td>
<td>39.32 (7.73)</td>
<td>0.31</td>
<td>-0.18</td>
<td>38.83 (9.31)</td>
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</tr>
<tr>
<td>Time 1</td>
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<td>0.14</td>
<td>39.61 (9.84)</td>
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</tr>
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</tr>
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<td>0.23</td>
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<tr>
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<td>1.29</td>
<td>0.83</td>
<td>5.11 (5.36)</td>
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</tr>
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<td>Tx X Time</td>
</tr>
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<td>Child Anxiety</td>
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<td>0.06</td>
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<tr>
<td>Time 1</td>
<td>30.19 (11.29)</td>
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<td>0.52</td>
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</tr>
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<td>Child Verbal Behaviors</td>
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<td>Child Disruptive Behaviors</td>
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<td>0.64</td>
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<td>6.79 (5.70)</td>
<td>Tx</td>
</tr>
<tr>
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</tr>
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<td>Tx X Time</td>
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</table>

Note. *p < .07, *p < .05, **p < .01.
research (Benito et al., 2015; Lebowitz et al., 2013, 2014b; Thompson-Hollands et al., 2014), 98% and 100% of participants engaged in accommodating behaviors at T1 and T2 respectively.

Table 4 presents bivariate correlations among primary variables for the full sample utilized in primary analyses. All measures demonstrated moderately strong correlations between T1 and T2, indicating temporal stability among outcomes measured. Relationships among the primary variables were in the expected direction. Among T1 outcomes, family accommodation was positively associated with all T1 outcomes (i.e., family accommodation of SM, parenting stress, parent anxiety, child anxiety, and child disruptive behaviors) with the exception of child verbal behaviors. Similarly, T1 family accommodation of selective mutism was positively related to all outcomes, as well as negatively related to child verbal behaviors. Aside from family accommodation, T1 parenting stress was not related to T1 outcomes. T1 parent anxiety was positively associated with T1 child anxiety and disruptive behaviors; however, there was no relation with T1 child verbal behaviors. Surprisingly, T1 child anxiety was positively associated with T1 disruptive behaviors, but not associated with T1 child verbal behaviors. Finally, the negative correlation between T1 verbal behaviors and T1 disruptive behaviors was trending towards significance. Among T2 variables, most correlations between variables were consistent. However, T2 family accommodation was not significantly associated to parenting stress or parent anxiety and was negatively associated with T2 child verbal behaviors. Similarly, T2 family accommodation of SM was not associated with T2 parent anxiety. The association between T2 parenting stress and T2 child anxiety was trending towards significance. Finally, the negative association between T2 child anxiety and T2 child verbal behaviors was trending towards significance.
Table 4

Bivariate Correlations among Continuous Demographic Variables and Time 1 and Time 2 Outcome Variables for the Final Sample

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<td>.33*</td>
<td>.79***</td>
<td>- .38**</td>
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Note. P Age = Parent age; C Age = Child age; HW = Hours per week; IN = Income; NH = Number in the home; FA = Parental family accommodation; PS = Parental stress; PA = Parental anxiety; CA = Child anxiety; VB = Child Verbal Behaviors; DB = Child disruptive behaviors.

* p < .07, * p < .05, ** p < .01, *** p < .001.
Finally, data were collected weekly for the workshop group to assess homework completion (see Table 5). The majority of participants who attended weekly workshops completed the weekly homework. With regard to tracking accommodation (i.e., all accommodation within Week 2-3, target accommodation within Week 4-5), participants ranged from completing this task between 1-7 days per week ($M_{\text{Week2}} = 4.78$ days; $M_{\text{Week3}} = 3.79$ days; $M_{\text{Week4}} = 3.00$ days; $M_{\text{Week5}} = 3.42$ days). Specific to implementing the behavioral plan to reduce accommodation (i.e., occurring the final two weeks of the workshop), the large majority of participants reported completion (91%-96%) which indicates participants were doing the independent work outside of the group that was expected for the workshop. Participants reported a range of 1 to 14 opportunities to implement the plan over the week, with the average being approximately 3-4 opportunities.

Mixed Design Repeated Measures ANOVA Analyses

To determine whether the synchronous online workshop effected dependent variables (i.e., family accommodation, family accommodation of selective mutism, parenting stress, parent anxiety, child anxiety, child verbal behaviors, and child disruptive behaviors), a 2x2 mixed design repeated measures ANOVA was carried out in SPSS. The between-subjects factor was condition (i.e., workshop condition versus the waitlist condition), and the within-subjects factor was time (i.e., T1 versus T2). For a hypothesis to be supported, the interaction between time and condition needed to be significant. When this interaction was found to be significant, mean level differences over time compared across groups were explored to understand the nature of the interaction. This process was repeated for each dependent variable. See Table 3 for results across outcome variables.
Table 5
Participants’ Workshop Homework Completion

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<th>Homework</th>
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<th>N</th>
<th>% Completed</th>
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<td>Identify child areas for growth</td>
<td>26</td>
<td>26</td>
<td>100%</td>
<td>1.00 (1.20)</td>
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<td><strong>Week 2</strong></td>
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<td>Track family accommodation</td>
<td>25</td>
<td>24</td>
<td>96%</td>
<td>4.78 (2.09)</td>
<td>1-7</td>
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<tr>
<td>Identify potential target accommodation</td>
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<tr>
<td>Track target accommodation</td>
<td>25</td>
<td>23</td>
<td>61%</td>
<td>3.79 (2.23)</td>
<td>1-7</td>
</tr>
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<td>Share written announcement</td>
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<td>96%</td>
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<td>Track target accommodation</td>
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<td>26</td>
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<td>96%</td>
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<tr>
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<td>Successful implementations</td>
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<td>Create list of supporters</td>
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<td>Supporters identified</td>
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*Note. Track target accommodation is measured in days. Discrepancies in N Attended and N are due to participants arriving late to session (i.e., after survey evaluating homework was completed*
Hypotheses 1-4 examined parent outcomes. To test Hypothesis 1, that participants in the workshop condition would report a greater decrease in family accommodation at T2 relative to T1 compared to those in the waitlist control condition, one repeated measures ANOVA was conducted. Between-condition, within-condition, and the interaction between them were not significant. Given these results, Hypothesis 1 was not supported.

Similarly, Hypothesis 2 predicted that participants in the workshop condition would report a greater decrease in family accommodation of selective mutism specifically at T2 relative to T1 compared to those in the waitlist control condition. Results of the ANOVA testing the interaction between time and condition were significant. Specifically, there was a main effect of condition (i.e., trending towards significance) and time, as well as a significant interaction between condition and time. Post-hoc paired samples t-tests found there was a significant decrease in family accommodation of SM over time within the workshop group, \( t(25) = 3.92, p < 0.01 \). However, there was not a significant change in family accommodation of SM over time in the waitlist control group, \( t(26) = -0.30, p = 0.38 \). These results indicate participants in the workshop condition had a significant decrease in family accommodation of SM from T1 to T2 compared to those in the waitlist control condition, whose family accommodation was stable from T1 to T2 (see Figure 2). Thus, Hypothesis 2 was supported.

Hypothesis 3, which proposed that participants in the workshop condition would report a greater decrease in parenting stress at T2 relative to T1, as compared to the waitlist control condition, was not supported. Specifically, results of the repeated measures ANOVA testing the interaction between time and condition were not significant. This indicates that the means of parenting stress did not change over time for the workshop or control group.
Hypothesis 4 predicted that participants in the workshop condition would report a greater decrease in parent anxiety at T2 relative to T1 as compared to the waitlist control condition. This hypothesis was somewhat supported given the results of the ANOVA testing the interaction between condition and time was trending toward significance ($p = .06$). Post-hoc paired samples $t$-test results indicated participants in the workshop group reported a significant decrease in parent anxiety from T1 to T2, $t(25) = 2.41, p = .02$, whereas the waitlist control condition had stable levels of parent anxiety over time, $t(26) = -.48, p = .64$ (see Figure 3).
Hypotheses 5-6, and Research Question 1 examined child outcomes. Hypothesis 5 proposed that participants in the workshop condition would report a greater decrease in child anxiety at T2 relative to T1 as compared to the waitlist control condition. Results from the repeated measures ANOVA revealed there were no significant outcomes for the between-condition, within-condition, or the interaction between time and group. Given these results, Hypothesis 5 was not supported. Hypothesis 6, predicting that participants in the workshop condition would report a greater decrease in child SM symptoms at T2 relative to T1 compared
to those in the waitlist control condition, was not supported. Specifically, between-condition, within-condition, and the interaction between them were not significant. As previously discussed, the sample size of this analysis was 51 (i.e., 25 in the intervention condition, 26 in the waitlist control condition) because the questionnaire was incomplete (n = 1) or items were not relevant for participants who were homeschooled (n = 1). Similarly, Research Question 1, which asked whether participants in the workshop condition would report a greater decrease in child disruptive behaviors at T2 relative to T1 compared to those in the waitlist control condition, was not supported. The repeated measures ANOVA indicated that the between-group condition was trending towards significance (i.e., indicating participants in the control condition reported higher levels of child disruptive behaviors at T1 and T2); however, there were no significant findings for the within-condition or interaction results.

Evaluation of Intervention Analyses

In addition to preliminary and primary analyses, participants in the workshop condition completed an evaluation of the parenting workshop. According to the TEI-sf, a score of 27 is indicative of moderate acceptability (Kelley et al., 1989). Participants in the workshop condition rated the workshop from moderate to high acceptability (Range = 26-42; M = 36.58, SD = 4.48). Participants in the workshop condition also reported on their subjective experience of how much they learned by completing the mindful parenting sessions, how much they utilized the skills, and whether they plan to utilize the skills they learned in the future. Evaluation items were completed by each of the participants in the workshop group. Within the workshop participants, 100% (n = 26) reported receiving something of lasting value or importance as a result of participating. Additionally, 100% (n = 26) reported making changes in their lifestyle related to
dealing with their child’s anxiety. Participants also reported the workshop helped them deal more
effectively with their problems either a great deal (58%, n = 15) or somewhat (42%, n = 11).
Further, all participants (100%, n = 26) reported it was their intention to keep targeting their
child’s anxiety by addressing family accommodation in daily life. Regarding the format of the
group, all participants (100%, n = 26) reported enjoying the group format and finding it helpful.
In addition, 77% (n = 20) felt very satisfied with the amount of personal help they received in the
group setting, and 23% (n = 6) felt mostly satisfied. With respect to the length of the workshop
(i.e., 6 weeks), 81% of participants (n = 21) reported the workshop was an appropriate length,
whereas 19% (n = 5) reported it was too short.
Participants in the workshop condition also reported on how much change they noticed as
a result of participating in the parenting workshop. Participants could indicate whether they
noticed 1 = Negative Change, 2 = No Change, 3 = Some Positive Change, or 4 = Positive
Change. As shown in Table 6, the majority of participants in the workshop condition reported
some positive change across all areas asked about (i.e., understanding how their behaviors may
play a role in their child’s anxiety, identifying accommodating behaviors, making a plan to
address accommodating behaviors). A few participants (i.e., 4-8%) reported no change in the
areas of understanding their child’s anxiety, understanding how their behaviors may play a role
in their child’s anxiety, increasing their support network to better address their child’s anxiety,
feeling confident as a parent, and feeling hopeful as a parent. Further, some parents (4%)
reported negative change in regard to increasing support to better address their child’s anxiety
and feeling more comfortable when their child is anxious. Collectively, most participants
reported at least some positive change that happened as a result of participating in the parent
training workshop across areas asked about in this evaluation.
| 1. Understanding my child’s anxiety. | 0% | 4% | 38% | 58% |
| 2. Understanding how my behaviors (and other caregiver’s behaviors) may play a role in my child’s anxiety (i.e., accommodating behaviors) | 0% | 4% | 15% | 81% |
| 3. Identifying accommodating behaviors. | 0% | 0% | 11% | 89% |
| 4. Making plans to address accommodating behaviors. | 0% | 0% | 11% | 89% |
| 5. Providing supportive statements to my child when they are anxious. | 0% | 0% | 31% | 69% |
| 6. Increasing my support network to better address my child’s anxiety. | 4% | 8% | 40% | 48% |
| 7. Feeling more comfortable when my child is anxious. | 4% | 0% | 46% | 50% |
| 8. Feeling confident as a parent. | 0% | 8% | 34% | 58% |
| 9. Feeling hopeful as a parent. | 0% | 8% | 27% | 65% |
CHAPTER 4
DISCUSSION

The primary aim of the current study was to examine whether an abbreviated version of an existing, empirically supported parenting intervention for child anxiety could extend benefits to children with SM when delivered in a group format via synchronous video. It was hypothesized that parents in the workshop condition would report lower levels of family accommodation broadly, family accommodation specific to SM, parenting stress, and anxiety compared to those in the waitlist control group. Additionally, in regard to child outcomes, it was hypothesized that children whose parents were in the workshop condition would report a decrease in anxiety, SM symptoms (i.e., increase in child verbal behaviors), and disruptive behaviors. Overall, little support for these hypotheses were observed with only differences in family accommodation specific to SM being found between the workshop group and control group over time.

Parent Outcomes

While the workshop itself targeted symptoms of children, it was critical to measure specific parent outcomes as they are conceptualized as being related to child outcomes. Specifically, the primary aim of the study was to understand whether the parenting workshop impacted levels of family accommodation, as this parent response is understood to maintain symptoms of child anxiety (Lebowitz, 2019). In the current sample, 98%-100% of parents in both the workshop and control group engaged in some form of family accommodation when
assessed pre- and post-workshop. This elevated level of accommodation is consistent across numerous studies (e.g., Benito et al., 2015; Lebowitz et al., 2013, 2014b; Thompson-Hollands et al., 2014) and justifies the need for interventions to target this parent response to anxiety.

Results indicated that family accommodation of SM was the primary measure that the parenting workshop impacted. This is not surprising given that increasing awareness of and shaping parent responses to SM-specific fears served as the major goals of the workshop. This suggests the intervention performed as expected with parents of the SM community, such that family accommodation of SM was significantly reduced. These results highlight that behavioral change capable of impacting child symptoms does not necessarily require a child to be present for the intervention. This is particularly important for families affected by SM given that inhibition (e.g., lack of verbal responses) can often interfere with progress in more common therapeutic modalities (e.g., CBT; Lebowitz et al., 2014a). Furthermore, because parental responses can be modified in an online format, it indicates that SM-trained clinicians could be capable of providing specialized support to a greater number of families.

It is important to note accommodations that were specific to SM decreased over time for the workshop group compared to the control group, whereas family accommodation broadly was consistent over time for both groups. These results are inconsistent with studies that targeted other forms of child anxiety (e.g., generalized anxiety disorder, separation anxiety disorder, social phobia, specific phobia, and obsessive-compulsive disorder) where broad family accommodation decreased (Dekel et al., 2020; Lebowitz et al., 2014a, 2020). The discrepancies may be in part due to the abbreviated intervention based on SPACE that was applied in the workshop. With additional workshop sessions, parents may have had the opportunity to target
broader accommodations and further generalize changes in their responses to anxiety across different child fears.

Alternatively, the difference in outcomes between broad and specific accommodation may be related to the measurement utilized to assess parents’ behavior. Examples of items from the general accommodation scale (i.e., FAS-A) include “How often did you reassure your child?” and “How often did you participate in behaviors related to your child’s anxiety?”, whereas added questions that were more specific include “How often did you answer questions directed to your child?” and “How often did you whisper in social settings with your child?” Ongoing research has found that the total accommodation scale derived from the FAS-A does not capture widely observed SM-specific accommodations, such as speaking for a child or accepting non-verbal responses (e.g., nodding; Fisher, 2021). This is likely because accommodations specific to SM are typically related to talking, which is common behavior in individual’s daily lives (Fisher, 2021). The primary fear in SM is easy to accommodate in a quick manner compared to accommodations for other fears, such as co-sleeping with a child who has separation difficulties, providing extra soap or hand sanitizer for handwashing compulsions, or repeatedly checking and sharing the weather forecast for a child who fears tornados. Because communication is an instinctual response when a child is non-verbal, and may reduce parents’ distress as well, parents likely have increased difficulty viewing these specific behaviors as accommodations. This, in turn, would result in parents being less likely to report accommodation on a broad measure. However, when provided specific examples of accommodations, such as answering for their child, parents may be able to better recognize this behavior as accommodation. These nuanced findings suggest that both researchers and clinicians could benefit from assessing
accommodations specific to the targeted disorder. Additionally, future research should focus on creating a measure that is sensitive to specific SM accommodations.

Parenting stress was also assessed as it has been identified as a potential secondary benefit in recent research examining SPACE outcomes (Lebowitz et al., 2020). In the current study, results revealed there was no significant change in parenting stress over time in the workshop or control condition. This may be because engaging in accommodating behaviors often reduces stress for parents (Lebowitz, 2019); therefore, actively attempting to reduce such behaviors may create a different type of stress within parents. For example, the questionnaire utilized to measure parenting stress includes items assessing whether parents have enough energy for their child, have enough time and flexibility within their lives, or feel they are able to balance parental responsibilities. During the workshop, parents often reported it took substantial time and effort to create opportunities to implement their behavioral plan. Additionally, it should be taken into consideration that parents only implemented the plan for the final two weeks of the workshop. The study that found a significant reduction in parenting stress implemented a 12-week version of SPACE (Lebowitz et al., 2020) compared to a 6-week version. Therefore, it may be that initial implementation of a behavioral plan results in parenting stress levels being maintained. In comparison, parents who implement the plan over a longer period of time could become more comfortable with witnessing their child’s anxiety and responding appropriately.

Reduced parent anxiety is considered another outcome that may be a secondary benefit of the SPACE intervention. In the current study, there was a decrease in parent anxiety over time that was trending towards significance in the workshop condition, whereas there was no change in parent anxiety in the control condition. These results are consistent with past research that has found non-significant decreases in parent anxiety from pre- to post-intervention (Lebowitz et al.}
2014a). Reduction in parent anxiety may be the result of extensive psychoeducation that parents receive during the workshop. If parents have a lack of understanding of their child’s difficulties, this may contribute to uncertainty and worry. A comprehensive review examining the impact of psychoeducation on anxiety disorders broadly in adults suggested that those who received psychoeducation had decreased distress, including anxiety symptoms (Rodrigues et al., 2018). In fact, a recent study found that just one web-based, self-guided psychoeducation session resulted in significant decreases in family accommodation of children’s anxiety symptoms (Sung et al., 2021). This suggests that as parents gain a better understanding of their child’s symptoms and are provided specific parenting skills, their uncertainty likely decreases, resulting in a more effective responses to their child’s fears. Additionally, in the workshop and traditional SPACE intervention, parents are able to implement plans, receive feedback, and problem-solve any difficulties. This support following psychoeducation may also contribute to reductions in parents’ anxiety. It should be noted that in both the current study and a study with a 12-week SPACE intervention, parents’ anxiety only marginally decreased over time. While psychoeducation and support may decrease parent anxiety, parents are ultimately still engaging in what is typically considered an anxiety-provoking task (i.e., not accommodating their child’s fears). Similar to parenting stress, initial worry associated with implementation of the behavioral plan may prevent a significant reduction in anxiety immediately following the abbreviated program.

Child Outcomes

Although parent outcomes were somewhat consistent with previous research, no child outcomes changed significantly over time for the workshop group or the control group. First,
children whose parents were in the workshop condition did not report significant changes in child anxiety over time compared to the waitlist control condition. These results are inconsistent with research that has found the SPACE intervention decreases anxiety symptoms across a range of anxiety disorders (Lebowitz et al., 2020). Similarly, results indicated there was no change in child verbal behaviors in the workshop group or the waitlist control group over time. While there is no research to date examining the impact of SPACE interventions on verbal behaviors (i.e., SM symptoms) specifically, it was hypothesized that verbal behaviors would increase over time in the workshop condition compared to the waitlist control condition given the high comorbidity among SM symptoms and anxiety (Driessen et al., 2020). Unexpectedly, the association between anxiety and verbal behaviors was not consistent with previous research. At T1, child anxiety symptoms and verbal behaviors were not related to each other, whereas at T2, their correlation was trending towards significance in the expected direction. This may be due to limited power or to the broad nature of the Total Anxiety subscale itself. However, post-hoc analyses revealed that the Social Phobia subscale of the Spence Children’s Anxiety Scale, as compared to the Total Anxiety subscale, was trending towards significance in the expected direction with child verbal behaviors at T1 ($r = -0.24, p = .10$) and significantly correlated in the expected direction at T2 ($r = -0.33, p = .02$). Similar to parent accommodation, this suggests it is important to use more specific assessments of anxiety to best capture symptoms. Finally, while not a target of the intervention, the current study explored whether disruptive behaviors would decrease over time in the workshop condition compared to the waitlist control condition given that SM has occasionally been associated with mild oppositionality (Cohan et al., 2008). This is the first study utilizing a protocol based on SPACE that examined this outcome and found no significant change over time in either group.
There are multiple reasons why the intervention may not have been as effective as treatment conducted in previous research. First, it is important to note multiple differences in the intervention format utilized in the current study compared to the traditional SPACE protocol. The most obvious difference is the length of the intervention. The current study implemented a 6-week intervention, whereas SPACE is typically 10-12 weeks. The goal of the abbreviated intervention was to determine if similar benefits could be found in a shorter time in order to make the intervention more feasible for parents to attend consistently. As previously discussed, parents in the current study had the opportunity to identify one target accommodation and implement an associated behavioral plan, whereas in the traditional intervention, parents have the opportunity to address two target accommodations. Additionally, the traditional intervention allows for increased flexibility to implement optional sessions as clinically indicated to bolster effectiveness (e.g., sessions focused on dealing with extreme disruptive behaviors, recruiting and engaging supporters, improving collaboration among parents, dealing with threats of self-injury or suicide). It may be that a 6-week intervention was not potent enough to confer benefits related to child anxiety and verbal behaviors.

Behavioral plans that parents implement in the current intervention are similar to that of exposure therapy tasks. Exposure therapy is an evidenced-based technique that intentionally increases an individual’s anxiety in a controlled way in order to break the pattern of avoidance and allow an individual to habituate (Abramowitz et al., 2019). Given that such tasks typically take time and repetition to habituate (Benito & Walther, 2015), it may be that the final two weeks of implementing the behavioral plan did now allow enough time for children to adjust to changes in their parents’ behaviors. Alternatively, because the 6-week intervention was potent enough to observe changes in parents’ accommodations of SM, it may be that increased
opportunities to implement the behavior plan were needed throughout the week. Ideal target accommodations are ones that occur on a daily basis, and parents in the current study reported implementing the behavioral plan approximately 3-4 times over a week. This suggests it may be important to identify more simplistic behavioral plans related to SM that can be executed more often. Further, it may be that additional time rather than additional intervention sessions is needed to observe changes in children’s anxiety and verbal behaviors. This would be consistent with other SM intervention studies that have found additional gains at 3-month follow-up assessments post-intervention (Bergman et al., 2013). While a longer intervention warrants investigation, it should be noted that the majority of participants in the workshop (i.e., 81%) reported the workshop was an appropriate length. Therefore, it may be important to consider alternative factors such as SM severity and whether the child has additional services in place (i.e., therapeutic or pharmacological intervention) to determine the most appropriate length.

An additional change in intervention format that may have contributed to a lack of findings is that the intervention was conducted in a group format versus individual format. While research has found reduction in child anxiety symptoms following both individual and group formats of SPACE (Dekel et al., 2020; Lebowitz et al., 2020), all studies conducted thus far implemented the traditional intervention in a 10-12-week format. Therefore, while there are multiple benefits to a group format (e.g., positive peer modeling, reinforcement of one another, social support; Wolgensinger, 2015), it may be that 6 weeks within a group does not allow for enough tailored, individual support to maximize the benefit of skills learned. Additionally, although all workshop participants reported enjoying the group format, approximately 77% felt very satisfied with the amount of individual support received while 23% reported feeling mostly satisfied. It could be useful to consider where families are in their SM treatment timeline. For
example, if families have recently received a diagnosis, they would likely still benefit from shared experience and support within a group setting; however, they may benefit from a group with more time spent in breakout rooms where greater individualized support is received. Alternatively, it could be beneficial to have additional co-leaders within a similar workshop structure in order to create a smaller ratio of participants to clinicians during the breakout rooms.

The last significant modification in the intervention that may have limited the change in child outcomes was conducting the intervention online versus in person. Online delivery of interventions increase access for individuals who do not live near a provider. This is particularly important for children with SM as research has found that access to gold-standard treatments is especially limited for conditions with low base-rates, such as SM (Comer & Barlow, 2014). While there are benefits to an online format, there are also drawbacks that can impact the efficacy of the intervention. For example, parents are more likely to experience increased distractions (e.g., interruptions by family members, opportunities to easily call, text, or browse the internet) compared to in-person interventions. These distractions may limit parents’ engagement and understanding of skills taught in the intervention. Similarly, although parents are requested not to, parents have the ability to turn their camera and microphone off during the intervention. The online format coupled with the group modality may have contributed to a distributed sense of responsibility to participate, thus restricting benefits that could have been gained.

Collectively, results indicated similar parent outcomes (i.e., significant decrease in parent accommodation specific to SM and decrease of parent anxiety that was trending towards significance) following the implementation of an abbreviated, online intervention based on
SPACE that targeted SM accommodations. However, the lack of change in child outcomes was not consistent with initial research supporting the original SPACE protocol. While results did not impact child outcomes immediately after the workshop, all workshop participants reported gaining something of lasting value as a result of participation, as well as making changes in the ways in which they respond to their child’s anxiety. Further, all participants reported they would recommend a similar workshop to a friend in need of comparable help. This suggests that the workshop itself was a positive and subjectively productive experience overall. Future research is needed to disentangle which delivery characteristics (e.g., length of treatment, group versus individual, online versus in-person) provide the greatest balance of maximum efficacy along with increased feasibility and accessibility to evidence-based SM interventions.

Limitations and Future Research

Although a robust experimental design was utilized in the current study, there are several limitations that should be considered. First, the generalizability of the current study is limited. The majority of participants identified as White, female, and highly educated. Given that the aim of the study was to examine whether this abbreviated online intervention is effective to increase feasibility of and access to evidence-based treatments, it would be critical to examine the impact of this intervention within a sample of families that have lower access to resources. Research has found that low-income and racial and/or ethnic minorities are disadvantaged in regard to getting access to pediatric mental health care due to a greater number of barriers (e.g., Alegria et al., 2010; Bringewatt & Gershoff, 2010; Young & Rabiner, 2015). The sample in the current study may reflect this barrier to treatment. Therefore, it would be necessary to evaluate barriers and stressors that marginalized families experience at a higher rate (e.g., lack of transportation or
childcare, less time due to working one or multiple jobs, less access to healthcare, increased stigma of psychological problems, mistrust of psychology; Leong & Kalibatseva, 2011) and seek to modify the recruitment procedure in an effort to address such barriers. Additionally, given that accommodation has been found to be a common response across families from a variety of cultural backgrounds (Lebowitz, 2019), research is needed within more diverse samples to understand whether the intervention is effective at reducing accommodation across families in a culturally sensitive manner. Overall, future research should focus on studies that will improve generalizability of results.

Furthermore, a significant number of children included in the current sample were receiving additional interventions to target symptoms. More specifically, approximately half of the children were receiving some form of regular therapeutic intervention to target anxiety symptoms, and approximately one fourth of the children were prescribed psychotropic medication to target anxiety symptoms. These individuals were evenly distributed between groups via randomization and agreed to refrain from any changes to treatment for the duration of the intervention. However, it would be beneficial to examine this intervention alone as well as in conjunction with other treatments, such as combining the workshop with therapeutic intervention and medication, just therapeutic intervention, or just medication. This would allow for a better understanding of whether the parent workshop can serve as a stand-alone treatment or if it is most effective as an additive treatment to SM intervention as usual. Additionally, it would be useful to conduct randomized controlled trials comparing SPACE to other evidenced-based SM interventions (e.g., PCIT-SM) to determine whether similar effects can be achieved without the child present in treatment.
Another limitation of the current study is that outcomes are solely measured from one parent’s perspective. Future research would benefit from including multiple raters to gain a more comprehensive view of the child’s functioning. For example, it would be important to include teacher ratings of anxiety symptoms and verbal behaviors given that the school serves as a primary setting where children with SM are inhibited. Further, if age-appropriate, it would be useful for children to provide assessments of their anxiety symptoms as there are often discrepancies between parent and child reports of symptoms (De Los Reyes & Kazdin, 2005). This is particularly true for internalizing symptoms given it can be challenging to assess accurately the level of internal distress from an external point of view. In addition to questionnaires, future research should consider the inclusion of an observational task to more objectively assess children’s verbal behaviors.

Further, current measurement of family accommodation is specific to the parent participating in the study. Participants in the workshop condition often reported that other family members in the home (e.g., partner, other children) would attempt to accommodate the child’s fears when the primary parent reduced accommodating behaviors. Therefore, it would be important to have all individuals in the home complete a measure of family accommodation to gain a better understanding of the frequency of accommodations within the family as a whole. Further, testing whether adding time to help the parent develop skills to support others in their support network accommodating their child less as part of the SPACE protocol could be examined. Alternatively, testing the involvement of multiple family members in the intervention in order to reduce accommodation across the family system may show increased effectiveness. Similarly, given that parents reported frequent accommodations in the school setting, it may be beneficial to have teachers complete a measure of accommodation to assess the severity of
accommodation across domains. Additional future directions for research could involve implementing a similar intervention with teachers who have students with SM, as students spend the majority of their days within the school where parents anecdotally report that accommodation frequently occurs. This approach may bolster the impact of the intervention if multiple settings are simultaneously and systematically targeted.

The assessment utilized for family accommodation of SM is another measurement limitation in the present study. While items were identified based on SPACE materials and consultation with an SM specialist, the measurement used is not an established measure that has displayed reliability and validity. This is particularly important to note given that this was the primary measure in which change was detected following the intervention. It would be important for future studies to identify appropriate items and conduct psychometric assessments within a large sample.

Additionally, although pre- and post-intervention assessments provide useful data about the immediate effect of the intervention, it would be beneficial to include additional follow-up assessments to determine if gains translate to changes in child outcomes over time. This is especially true given that previous research examining SM interventions have found additional gains as time continued post-treatment (e.g., Bergman et al., 2013). Further, having multiple follow-up data points could allow for a better understanding of the mechanism of change. For example, although anxiety symptoms are cross-sectionally linked to family accommodation (Kagan et al., 2016; Lebowitz et al., 2013, 2016; Norman et al., 2015; Reuman & Abromowitz, 2017; Storch et al., 2015), research has yet to examine these associations in a longitudinal design. Further, it would be useful to study which factors (e.g., emotion regulation, social support) increase the likelihood that parents can successfully implement a behavioral plan to
reduce accommodation to determine whether additional, optional modules could be beneficial (e.g., distress tolerance for parents). Beyond mechanisms of change, future studies with larger sample sizes would benefit from examining moderating factors, such as child age and SM symptom severity, as well as differences among group cohorts.

**Summary and Clinical Implications**

Currently there is limited research examining the long-term effects of SM; however, it is well known that broad anxiety symptoms in children have been associated with negative outcomes across domains (e.g., academic, social, home, personal areas of functioning; Drake & Ginsburg, 2012; Greco & Morris, 2004; Muroff & Ross, 2011). This suggests it is critical to intervene at the earliest opportunity. The current study examined whether an online, abbreviated, group intervention based on the SPACE protocol could serve as an alternative intervention for children with SM. Results revealed the parenting workshop was effective at reducing family accommodation specific to SM. Given that family accommodation is associated with maintenance of child anxiety symptoms (Lebowitz et al., 2019), this intervention serves as an effective initial step in breaking a problematic parent-child cycle for children with SM.

While the abbreviated intervention impacted parent accommodation of SM, results indicated that benefits did not transfer to child outcomes, including child anxiety and verbal behaviors, immediately following the intervention. There may be multiple factors that contributed to this lack of findings, including the length of the intervention, format (i.e., group compared to individual), and modality (i.e., synchronous video conferencing versus in-person). Future research should focus on identifying the most impactful, yet efficient, feasible, and accessible variation of this intervention for children with SM.
Despite the limitations, the study collectively suggests that this novel intervention may be particularly useful when a child is initially flagged for SM concerns. By providing parents psychoeducation and shaping their behaviors as early as possible, the intervention could serve as a protective factor from worsening SM symptoms over time. It may be that a modified version of the current intervention (e.g., lengthened) could transfer benefits to child outcomes and serve as a stand-alone intervention. Alternatively, in an effort to better address child symptomology, a workshop similar to this could be considered as an initial step of intervention before transitioning to child-focused work. Overall, this study adds to literature that conceptualizes child anxiety, and SM specifically, as a systemic problem rather than an individual problem. While the current study serves as an initial step in examining the efficacy of parent-only interventions for SM, ample work is required to better understand the greatest potential impact and role of similar interventions.
REFERENCES


APPENDIX A

INFORMED CONSENT FORM
Supportive Parenting for Selective Mutism Study
Informed Consent Form

Investigators:
Name: Jacqueline Pabis  Dept: Psychology  Email: spsm.pabis@gmail.com
Name: Laura Pittman  Dept: Psychology  Email: lpittman@niu.edu

Key Information:
- This is a voluntary research study on the efficacy of a parent training workshop for parents of children with symptoms of selective mutism.
- This three time-point study involves questionnaires regarding parent behaviors, parent stress, and parent and child psychological functioning. All participants will complete questionnaires.
- Participants will be randomly assigned to either receive or not receive the 6-week parent workshop. Those who did not receive the parent workshop will be given the opportunity to receive it at the end of the study.
- Direct benefits of participation are possible increased insight into parenting behaviors and increased supportive behaviors in regard to your child’s anxiety. The risks include the possibly of experiencing sadness, negative feelings, or distress when answering questions or practicing learned skills; however, it is unlikely that these negative feelings will go beyond your daily experiences.

You are eligible to participate in the Supportive Parenting for Selective Mutism Study. The purpose of the Supportive Parenting for Selective Mutism Study is to evaluate the effectiveness of a parent training workshop with parents of children who have symptoms of selective mutism. Participants will be randomized into two groups: a group will receive the workshop and a control group (with the opportunity to receive the workshop at the end of the study). Participation in this study takes place over a 15-week period. For the first part, you will complete questionnaires about yourself, your emotions, your parenting, your stress, and your child in addition to demographic information. For the following six weeks, you will either participate in the group workshop or you will not. If you are in the workshop group, each week you participate in the group workshop you be required to complete home practice assignments of learned skills. It should be understood that, when participating in a group workshop, confidentiality among the members of the group cannot be guaranteed. Following the final session of the group workshop, regardless of whether you were in the workshop or not, you will again complete questionnaires about yourself, your emotions, your parenting, your stress, and your child. Finally, eight weeks following the workshop, you will also be contacted to complete the same questionnaires described above.

You understand that in the first part of the study, you will answer questions about yourself, your emotions, your parenting, your stress, and your child. You understand that you will be randomly selected to be in the workshop group or the control group, with the opportunity to complete the workshop at the end of the study if you were assigned to the control group. If randomly selected for the workshop group, you understand that each week you will participate in the group workshop via synchronous videoconferencing and associated activities for six consecutive weeks. In general, weekly sessions will take approximately 90 minutes and weekly homework will range from approximately 15 minutes to 1 hour. You understand that after the final workshop session you will answer questions about yourself, your emotions, your parenting, your stress, and your child. You understand that eight weeks following the workshop you will answer the same questionnaires as a follow-up.
You agree to participate in the research study entitled Supportive Parenting for Selective Mutism. You understand that you must be a parent of at least one child with symptoms of selective mutism between the ages of 5 and 12 living with you to participate in this study. In addition, you must be at least 18 years old, fluent in English, and living in the United States. You understand that, if applicable, you agree to refrain from changes in your child’s ongoing treatment (i.e., therapy services or medication) during the course of the 7-week period (i.e., from completing the pre-workshop questionnaires to the post-workshop questionnaires). You understand that, whether you are in the workshop group or the control group, you will be paid $15 after completing the pre-workshop questionnaire, $25 after completing the post-workshop questionnaire, and $25 for completing the 8-week post-workshop questionnaire through electronic Amazon gift cards.

You understand that all the information collected will remain confidential. You should be aware that this study utilizes Qualtrics to collect your responses and your data will be stored on their servers during the data collection phase. Qualtrics protects the privacy of your responses as you can see in their online documentation at http://www.qualtrics.com/privacystatement/ and http://www.qualtrics.com/security-statement/. Once data is transferred off of Qualtrics, it will be coded and stored as a password protected file stored on a password-protected shared drive in a locked research lab, which only research staff can access. Your information collected as a part of this research will not be used or distributed for future research, even if all identifiers are removed. Any presentations, reports, or publications based on the data collected in this study will use group data only. You understand that you are under no obligation to participate in this study, and that you may discontinue at any time. You also understand that you can skip any item by selecting “I prefer not to answer.”

You understand that you can contact Jacqueline Pabis or Dr. Laura Pittman through their contact information below if you have any questions about the study before, during, or after the study. If you want further information regarding your rights as a research participant, you may contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588.

Jacqueline M. Pabis, M.A.  
Graduate Student Researcher  
Psychology Department  
Northern Illinois University  
spsm.pabis@gmail.com

Laura D. Pittman, Ph.D.  
Supervising Faculty  
Psychology Department  
Northern Illinois University  
(815) 753-2485  
lpittman@niu.edu

By clicking “next” you certify that you are a parent fluent in English living in the United States, who is at least 18 years old, and who has at least one child between age 5 and 12 living with you that displayed symptoms of selective mutism, you agree to refrain from changes in your child’s ongoing therapy or medication services during the 7-week period (i.e., from completing the pre-workshop questionnaires to the post-workshop questionnaires) if applicable, and that you have reviewed and understand the above statements and consent to participate in this study deemed necessary by the study investigators.
You understand that the group workshop sessions conducted via synchronous videoconferencing will be recorded (i.e., audio and video) to ensure workshop integrity. You understand recording files will be password protected and kept on a password-protected shared drive. You understand recordings will be kept until they are reviewed for integrity (i.e., up to one month), at which point recordings will be deleted.

By clicking “next” you give your consent audio and video recorded in group workshops via synchronous videoconferencing.

As part of the study, you will receive reminder. The workshop group will receive reminders about the next session and to complete assignments. Both the workshop group and control group will receive information when the questionnaires are available and a reminder to complete them.

Please indicate below your preferred method of communication for reminders:

- Email
- Text
APPENDIX B

SCREENING FORM
Screening Form

1. Are you a parent?
   - Yes
   - No

2. Are you the primary caregiver of your child(ren) (i.e., are you the parent who spends the most time caring for your child(ren))?
   - Yes
   - No

3. How old is your child?
   - 1 to 4 years
   - 5 to 12 years
   - 13 to 15 years
   - 16 or older

4. Do you live in the United States?
   - Yes
   - No

5. Are you under the age of 18?
   - Yes
   - No

6. Are you fluent at speaking and reading English?
   - Yes
   - No

7. Has your child been provided a diagnosis of Selective Mutism?
   - Yes
     - When was this diagnosis provided?
     - Who was this diagnosis provided by? (Provider Type and Name)
   - No

8. Is there an obvious difference between your child’s speaking behavior at home (more talkative) and outside the home (minimal speaking or mute)?
   - Yes
     - Please describe child’s speaking behavior in home setting.
     - Please describe child’s speaking behavior in settings outside of home.
   - No
9. Does your child fail to speak in at least one setting even though it is expected of them?
   - Yes
     - What type of setting? List all. (Home/School/Public/Social)
       - If multiple, which setting is most severe?
     - With what type of people? List all. (Familiar Adults/Unknown Adults/
   - No

10. Does not talking in certain settings interfere with your child’s life?
    - Yes
      - In which settings does your child experience interference in their life? List all. (School/Family Relationships/Social Situations)
      - *To what extent: Slightly, Moderately, Extremely
        *Repeat for each setting the child experiences functional impairment
    - No

11. Does your child have a diagnosis of Intellectual Disability (ID) or Autism Spectrum Disorder (ASD)?
    - Yes
      - Specify ID or ASD.
    - No

12. Does your child have any other mental health difficulties that interfere with their life more than not talking in certain situations or feeling anxious (e.g., severe depression)?
    - Yes
      - Please specify.
    - No

13. If you are eligible to participate, would you be willing to refrain from changes in ongoing treatment (e.g., psychosocial or pharmacological) during the 6-week study period?
    - Yes
    - No

Please provide your email_____________________
Please provide your cell phone number______________
Please provide your home phone number (if applicable)______________
What is your preferred method of contact?
Email
Phone Call
Text
APPENDIX C

DEMOGRAPHIC FORM
Demographic Form

Type your gender: _______________

Type your age in years:

Please indicate the racial/ethnic classification that applies to you (mark all that apply).
- American Indian/Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- White
- Multiracial
- Other, please specify:

What is your relationship status?
- Married/Cohabiting
- Divorced/Separated
- Dating/Single

What is the highest level of education you completed?
- Less than 12th grade
- High school graduate
- Some college/university, no degree
- College degree (2-year or 4-year)
- Graduate or Professional degree

What is your employment status?
- Stay at home parent
- Part-time
  - What kind of business or industry (e.g., healthcare, education, retail) do you work in?
  - What kind of job or occupation (e.g., nurse, teacher, manager) do you have?
  - How many hours do you work each week on average?
  - Indicate what percentage of your work is done in the home? [slider/thermometer type response option]
  - On a scale of 1 to 5, how flexible or accommodating is your job is when you need to modify your hours or leave work early due to unexpected family reasons?
    - 1 – Very Inflexible; 5 – Very Flexible [slider/thermometer type response option]
- Full-time
  - What kind of business or industry (e.g., healthcare, education, retail) do you work in?
  - What kind of job or occupation (e.g., nurse, teacher, manager) do you have?
- How many hours do you work each week on average?
- What percentage of your work is done in the home?
- Indicate how flexible or accommodating your job is when you need to modify your hours or leave work early due to unexpected family reasons.
  - 1 – Very Inflexible; 5 – Very Flexible [slider/thermometer type response option]

What is your average yearly household income?
- Less than $15,000
- $15,000 – $20,000
- $21,000 – $30,000
- $31,000 – $50,000
- $51,000 – $70,000
- $71,000 – $90,000
- $91,000 – $110,000
- $111,000-$130,000
- $131,000 - $150,000
- More than $151,000

For each person in your household, please indicate the gender, age, grade (if applicable), ethnicity/racial identity, and relationship to you:

<table>
<thead>
<tr>
<th>Gender: [M, F, Transgender]</th>
<th>Age</th>
<th>Age &amp; Grade (If applicable)</th>
<th>Racial/Ethnic Identity</th>
<th>Relationship to YOU [spouse/partner, parent, biological child, step-child, adopted child, other]</th>
<th>Sometimes people live in more than one place. Please indicate how much they live in your house. [Only in my house; primarily in my house (e.g., 4+ days per week); split 50/50; primarily live in another house; rarely live in my house (e.g., fewer than 1 day per week)]</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
Has your child been provided a diagnosis of Selective Mutism?
  o Yes
    • At what age was this diagnosis provided?
    • Who was this diagnosis provided by? (Provider Type)
  o No

Does your child have any additional diagnoses?
  o Yes
    • Please specify.
  o No

Has your child received therapy in the past?
  o Yes
    • Did therapy target symptoms of selective mutism?
      o Yes
      o No
  o No

Is your child in therapy currently?
  o Yes
    • Does therapy target symptoms of selective mutism?
      o Yes
      o No
  o No

If applicable, please provide the following information about therapy services:

<table>
<thead>
<tr>
<th>Date Range of Therapy: (Please list end date as “Current” if services are ongoing)</th>
<th>Reason for Therapy: [Please specify if selective mutism symptoms were addressed]</th>
<th>Setting: (Clinic, School)</th>
<th>Type (Psychological, Speech, Developmental) and Format (Please identify by the majority of the sessions):</th>
<th>Average Number of Sessions Per Week:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>For Reference: Individual (Child present; e.g., 1 hour per week) Intensive (Child present; e.g., 2+ consecutive hours of therapy per day) Family (Child and parent present; e.g., 1 hour per week) Parent-Only (Parent present; e.g., 1 hour per week)</td>
<td></td>
</tr>
</tbody>
</table>
Has your child taken medication to help with mental health issues in the past?
   o  Yes
      •  Was the medication for anxiety?
         o  Yes
         o  No
   o  No

Does your child currently take medication to help with mental health issues?
   o  Yes
      •  Is the medication for anxiety?
         o  Yes
         o  No
   o  No

If applicable, please provide the following information about medication:

<table>
<thead>
<tr>
<th>Date Range of Medication: (Please list end date as “Current” if medication is ongoing)</th>
<th>Medication Type:</th>
<th>Medication Dosage:</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

What type of services does your child currently receive in school?
   o  504 Plan
      •  What services does your child receive?
   o  IEP
      •  What services does your child receive?
   o  None

What type of classroom is your child in?
   o  Regular education
   o  Mixed regular and special education
   o  Completely special education
APPENDIX D

FAMILY ACCOMMODATION SCALE – ANXIETY (FAS-A)
Family Accommodation Scale - Anxiety (FAS-A)

<table>
<thead>
<tr>
<th>Participation in symptom related behaviors in the past month</th>
<th>Never</th>
<th>1-3 Times a Month</th>
<th>1-2 Times a Week</th>
<th>3-6 Times a Week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often did you reassure your child?</td>
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<tr>
<td>2. How often did you provide items needed because of anxiety?</td>
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<tr>
<td>3. How often did you participate in behaviors related to your child’s anxiety?</td>
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<tr>
<td>4. How often did you assist your child in avoiding things that might make him/her more anxious?</td>
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<tr>
<td>5. Have you avoided doing things, going places, or being with people because of your child’s anxiety?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Modification of functioning during the past month</th>
<th>No</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Have you modified your family routine because of your child’s symptoms?</td>
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<tr>
<td>7. Have you had to do things that would usually be your child’s responsibility?</td>
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<tr>
<td>8. Have you modified your work schedule because of your child’s anxiety?</td>
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<tr>
<td>9. Have you modified your leisure activities because of your child’s anxiety?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Distress and Consequences</th>
<th>No</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Does helping your child in these ways cause you distress?</td>
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<tr>
<td>11. Has your child become distressed when you have not provided assistance? To what degree?</td>
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<tr>
<td>12. Has your child become angry/abusive when you have not provided assistance? To what degree?</td>
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<tr>
<td>13. Has your child’s anxiety been worse when you have not provided assistance? How much worse?</td>
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</tbody>
</table>
*Below is a list of common parental behaviors. In the past two weeks, how often did you engage in any of the following behaviors *in response to your child’s fear or anxiety?*

<table>
<thead>
<tr>
<th></th>
<th>Never or N/A</th>
<th>1-2 Times a Week</th>
<th>3-6 Times a Week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Answered questions directed to my child.</td>
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<tr>
<td>2.</td>
<td>Whispered in social settings with my child.</td>
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<tr>
<td>3.</td>
<td>Bent down to my child’s level when my child was communicating with me.</td>
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<td>4.</td>
<td>Let my child stay home from school.</td>
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<tr>
<td>5.</td>
<td>Picked up my child from school early.</td>
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<tr>
<td>6.</td>
<td>Let my child avoid social engagements.</td>
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<tr>
<td>7.</td>
<td>Drove/picked up child from school to avoid the bus.</td>
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<td>8.</td>
<td>Ordered at a restaurant for my child.</td>
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<tr>
<td>9.</td>
<td>Let my child have a “mental health day.”</td>
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<tr>
<td>10.</td>
<td>Got my child out of a school assignment or activity by telling the teacher about the child’s symptoms.</td>
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<tr>
<td>11.</td>
<td>Responded to text messages/calls from my child when they were anxious.</td>
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<tr>
<td>12.</td>
<td>Parent stayed home from work.</td>
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<tr>
<td>13.</td>
<td>Parent came home early from an outing.</td>
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<td>14.</td>
<td>Let my child not attend a birthday party they were invited to.</td>
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<tr>
<td>15.</td>
<td>Discussed with my child how other people don’t understand the child (e.g., don’t ask questions in the right way).</td>
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</table>

*Items added for the current study to assess Family Accommodation of Selective Mutism. Not part of the FAS-A.*
APPENDIX E

PARENTAL STRESS SCALE (PSS)
Parental Stress Scale (PSS)

Instructions: The following statements describe feelings and perceptions about the experience of being a parent. Think of each of the items in terms of how your relationship with your [youngest, second oldest, or oldest] 12- to 17-year-old child typically is. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided.

The rating scale is as follows:
1 – Strongly Disagree
2 – Disagree
3 – Undecided
4 – Agree
5 – Strongly Agree

1. I am happy in my role as a parent.*
2. There is little or nothing I wouldn't do for my child if it was necessary.*
3. Caring for my child sometimes takes more time and energy than I have to give.
4. I sometimes worry whether I am doing enough for my child.
5. I feel close to my child.*
6. I enjoy spending time with my child.*
7. My child is an important source of affection for me.*
8. Having child gives me a more certain and optimistic view for the future.*
9. The major source of stress in my life is my child.
10. Having child leaves little time and flexibility in my life.
11. Having child has been a financial burden.
12. It is difficult to balance different responsibilities because of my child.
13. The behavior of my child is often embarrassing or stressful to me.
14. If I had it to do over again, I might decide not to have child.
15. I feel overwhelmed by the responsibility of being a parent.
16. Having child has meant having too few choices and too little control over my life.
17. I am satisfied as a parent.*
18. I find my child enjoyable.*

*Denotes item is reverse scored
APPENDIX F

DEPRESSION ANXIETY AND STRESS SCALE - SHORT FORM (DASS-21)
Depression Anxiety and Stress Scale - Short Form (DASS-21)

Instructions: For each item, please mark the box for Never, Sometimes, Often, or Almost Always, which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:
NEVER - Did not apply to me at all
SOMETIMES - Applied to me to some degree, or some of the time
OFTEN - Applied to me to a considerable degree, or a good part of time
ALMOST ALWAYS - Applied to me very much, or most of the time

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I found it hard to wind down.</td>
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<tr>
<td>2. I was aware of dryness of my mouth.</td>
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<tr>
<td>3. I couldn’t seem to experience any positive feeling at all.</td>
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<td>4. I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion).</td>
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<td>5. I found it difficult to work up the initiative to do things.</td>
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<td>6. I tended to over-react to situations.</td>
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<td>7. I experienced trembling (e.g., in the hands).</td>
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<td>8. I felt that I was using a lot of nervous energy.</td>
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<td>9. I was worried about situations in which I might panic and make a fool of myself.</td>
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<td>10. I felt that I had nothing to look forward to.</td>
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<td>11. I found myself getting agitated.</td>
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<tr>
<td>12. I found it difficult to relax.</td>
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<td>13. I felt down-hearted and blue.</td>
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<tr>
<td>14. I was intolerant of anything that kept me from getting on with what I was doing.</td>
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<tr>
<td>15. I felt I was close to panic.</td>
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<td>16. I was unable to become enthusiastic about anything.</td>
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<td>17. I felt I wasn’t worth much as a person.</td>
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<td>18. I felt that I was rather touchy.</td>
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<td>19. I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).</td>
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<td>20. I felt scared without any good reason.</td>
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<tr>
<td>21. I felt that life was meaningless.</td>
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APPENDIX G

SPENCE CHILDREN’S ANXIETY SCALE FOR PARENTS (SCAS-P)
Spence Children’s Anxiety Scale for Parents (SCAS-P)

Instructions: Below is a list of items that describe children. For each item please circle the response that best describes your child. Please answer all the items.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My child worries about things.</td>
<td></td>
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<tr>
<td>2</td>
<td>My child is scared of the dark.</td>
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<td></td>
<td></td>
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<tr>
<td>3</td>
<td>When my child has a problem, (s)he complains of having a funny feeling in his/her stomach.</td>
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<tr>
<td>4</td>
<td>My child complains of feeling afraid.</td>
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<tr>
<td>5</td>
<td>My child would feel afraid of being on his/her own at home.</td>
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<tr>
<td>6</td>
<td>My child is scared when (s)he has to take a test.</td>
<td></td>
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<tr>
<td>7</td>
<td>My child is afraid when (s)he has to use public toilets or bathrooms.</td>
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<tr>
<td>8</td>
<td>My child worries about being away from us/me.</td>
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<tr>
<td>9</td>
<td>My child feels afraid that (s)he will make a fool of him/herself in front of people.</td>
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<tr>
<td>10</td>
<td>My child worries that s(he) will do badly at school.</td>
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<tr>
<td>11</td>
<td>My child worries that something awful will happen to someone in our family.</td>
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<tr>
<td>12</td>
<td>My child complains of suddenly feeling if (s)he can’t breathe when there is no reason for this.</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>My child as to keep checking that (s)he has done things right (like switch is off, or the door is locked).</td>
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<tr>
<td>14</td>
<td>My child is scared if (s)he has to sleep on his/her own.</td>
<td></td>
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<tr>
<td>15</td>
<td>My child has trouble going to school in the mornings because (s)he feels nervous or afraid.</td>
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<tr>
<td>16</td>
<td>My child is scared of dogs.</td>
<td></td>
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<tr>
<td>17</td>
<td>My child can’t seem to get bad or silly thoughts of his his/her head.</td>
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<tr>
<td>18</td>
<td>When my child has a problem, (s)he complains of his/her heart beating really fast.</td>
<td></td>
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<tr>
<td>19</td>
<td>My child suddenly starts to tremble or shake when there is no reason for this.</td>
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<tr>
<td>20</td>
<td>My child worries that something bad will happen to him/her.</td>
<td></td>
<td></td>
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<tr>
<td>21</td>
<td>My child is scared of going to the doctor or dentist.</td>
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<tr>
<td>22.</td>
<td>When my child has a problem, (s)he feels shaky.</td>
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<tr>
<td>23.</td>
<td>My child is scared of heights (e.g., being at the top of a cliff).</td>
<td></td>
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<tr>
<td>24.</td>
<td>My child has to think special thoughts (like numbers or words) to stop bad things from happening.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25.</td>
<td>My child feels scared if (s)he has to travel in the car, or on a bus or train.</td>
<td></td>
<td></td>
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<tr>
<td>26.</td>
<td>My child worries what other people think of him/her.</td>
<td></td>
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<tr>
<td>27.</td>
<td>My child is afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds).</td>
<td></td>
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<tr>
<td>28.</td>
<td>All of the sudden my child feels really scared for no reason at all.</td>
<td></td>
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<tr>
<td>29.</td>
<td>My child is scared of insects or spiders.</td>
<td></td>
<td></td>
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<tr>
<td>30.</td>
<td>My child complains of suddenly becoming dizzy or faint when there is no reason for this.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>31.</td>
<td>My child feels afraid when (s)he has to talk in front of the class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>My child complains of his/her heard suddenly starting to beat too quickly for no reason.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>33.</td>
<td>My child worries that (s)he will suddenly get a scared feeling when there is nothing to be afraid of.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>34.</td>
<td>My child is afraid of being in small closed places, like tunnels or small rooms.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>35.</td>
<td>My child has to do some things over and over again (like washing his/her hands, cleaning or putting things in a certain order).</td>
<td></td>
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<tr>
<td>36.</td>
<td>My child gets bothered by bad or silly thoughts or pictures in his/her head.</td>
<td></td>
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<tr>
<td>37.</td>
<td>My child has to do certain things in just the right way to stop bad things from happening.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>38.</td>
<td>My child would feel scared if (s)he had to stay away from home overnight.</td>
<td></td>
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</tr>
</tbody>
</table>
Selective Mutism Questionnaire (SMQ)

Instructions: Please consider your child’s behavior in the last two weeks and rate how frequently each statement is true for your child.

<table>
<thead>
<tr>
<th>AT SCHOOL</th>
<th>Never</th>
<th>Seldom</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When appropriate, my child talks to most peers at school.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. When appropriate, my child talks to selected peers (his/her friends) at school.</td>
<td></td>
<td></td>
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<tr>
<td>3. When my child is asked a question by his/her teacher, s/he answers.</td>
<td></td>
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<tr>
<td>4. When appropriate, my child asks his or her teacher questions.</td>
<td></td>
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<tr>
<td>5. When appropriate, my child speaks to most teachers and staff at school.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. When appropriate, my child speaks in groups or in front of the class.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HOME/FAMILY</th>
<th>Never</th>
<th>Seldom</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. When appropriate, my child talks to family members living at home when other people are present.</td>
<td></td>
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</tr>
<tr>
<td>8. When appropriate, my child talks to family members while in unfamiliar places.</td>
<td></td>
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</tr>
<tr>
<td>9. When appropriate, my child talks to family members that don’t live with him/her (e.g., grandparents, cousin).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. When appropriate, my child talks on the phone to his/her parents and siblings.</td>
<td></td>
<td></td>
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<tr>
<td>11. When appropriate, my child speaks with family friends who are well-known to him/her.</td>
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<tr>
<td>12. My child speaks to at least one babysitter.</td>
<td>(or N/A)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>IN SOCIAL SITUATIONS (OUTSIDE OF SCHOOL)</th>
<th>Never</th>
<th>Seldom</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. When appropriate, my child speaks with other children who s/he doesn’t know.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14. When appropriate, my child speaks with family friends who s/he doesn’t know.</td>
<td></td>
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<tr>
<td>15. When appropriate, my child speaks with his or her doctor and/or dentist.</td>
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<tr>
<td>16. When appropriate, my child speaks to store clerks and/or waiters.</td>
<td></td>
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</tr>
<tr>
<td>17. When appropriate, my child talks when in clubs, teams, or organized activities outside of school.</td>
<td></td>
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</tr>
<tr>
<td>INTERFERENCE/DISTRESS</td>
<td>Not at all</td>
<td>Slightly</td>
<td>Moderately</td>
<td>Extremely</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>18. How much does not talking interfere with school for your child?</td>
<td></td>
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<tr>
<td>19. How much does not talking interfere with family relationships?</td>
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<tr>
<td>20. How much does not talking interfere in social situations for your child?</td>
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<tr>
<td>21. Overall, how much does not talking interfere with the life of your child?</td>
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</tbody>
</table>
APPENDIX I

BEHAVIOR AND FEELINGS SURVEY - CAREGIVER REPORT (BFS)
Instructions: How much has your child had each of the following problems during the past week? Use a 0 to 4 scale.

The rating scale is as follows:
0 – Not a problem
4 – A very big problem

<table>
<thead>
<tr>
<th>Conduct and Behavior</th>
<th>0 Not a Problem</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 A Very Big Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Talking back or arguing with parents or other adults.</td>
<td></td>
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<tr>
<td>2. Refusing to do what adults tell him/her to do.</td>
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<tr>
<td>3. Doing things he/she is not supposed to do.</td>
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<tr>
<td>4. Being rude or disrespectful to people.</td>
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<tr>
<td>5. Arguing with people.</td>
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<tr>
<td>6. Breaking the rules at home or at school.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Thoughts and Feelings</th>
<th>0 Not a Problem</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 A Very Big Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Feeling sad.</td>
<td></td>
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<tr>
<td>8. Feeling bad about himself/herself, or not liking himself/herself</td>
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<tr>
<td>10. Feeling nervous or afraid.</td>
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<tr>
<td>11. Worrying about bad things happening.</td>
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<tr>
<td>12. Thinking sad of scary thoughts over and over again.</td>
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</table>
APPENDIX J

TREATMENT EVALUATION INVENTORY – SHORT FORM (TEI-SF)
Treatment Evaluation Inventory – Short Form (TEI-sf)

Instructions: Please complete the items listed below by choosing the item that best indicates how you feel about the parent training workshop. Please reach the items very carefully because accidentally choosing one item rather than another may not represent the meaning you intended.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find this approach to be an acceptable way of dealing with the child’s anxious behavior.</td>
<td></td>
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<tr>
<td>2. I would be willing to use this procedure if I had to change the child’s anxious behavior.</td>
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<tr>
<td>3. I believe that it would be acceptable to use this approach without the child’s consent.</td>
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<tr>
<td>4. I like the procedure used in this approach.</td>
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<tr>
<td>5. I believe this approach is likely to be effective.</td>
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<tr>
<td>6. I believe the child will experience discomfort during this approach.</td>
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<tr>
<td>7. I believe this approach is likely to result in permanent improvement.</td>
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<tr>
<td>8. I believe it would be acceptable to use this approach with individuals who cannot choose treatments for themselves.</td>
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<tr>
<td>9. Overall, I have a positive reaction to this approach.</td>
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APPENDIX K

CLIENT SATISFACTION EVALUATION
Client Satisfaction Evaluation

1. How would you rate the quality of services you received?
   a. Excellent
   b. Good
   c. Fair
   d. Poor

2. Do you feel you got something of lasting value of importance as a result of participating in this intervention?
   a. Yes
   b. No

3. Have you made any changes in your lifestyle, in dealing with your child’s anxiety, as a result of the intervention?
   a. Yes
   b. No

4. Did the intervention help you to deal more effectively with your problem?
   a. Yes, a great deal
   b. Yes, somewhat
   c. No, did not help
   d. No, made it worse

5. Did, as a result of the parent workshop, something change on the following issues?

<table>
<thead>
<tr>
<th></th>
<th>Negative change</th>
<th>No change</th>
<th>Some positive change</th>
<th>A lot of positive change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Understanding my child’s anxiety</td>
<td></td>
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<tr>
<td>B. Understanding how my behaviors (and other caregiver’s behaviors) may play a role in my children’s anxiety (i.e., accommodating behaviors)</td>
<td>Negative change</td>
<td>No change</td>
<td>Some positive change</td>
<td>A lot of positive change</td>
</tr>
<tr>
<td>C. Identifying accommodating behaviors</td>
<td>Negative change</td>
<td>No change</td>
<td>Some positive change</td>
<td>A lot of positive change</td>
</tr>
<tr>
<td>D. Making plans to address accommodating behaviors</td>
<td>Negative change</td>
<td>No change</td>
<td>Some positive change</td>
<td>A lot of positive change</td>
</tr>
<tr>
<td>E. Providing supportive statements to my child when they are anxious</td>
<td>Negative change</td>
<td>No change</td>
<td>Some positive change</td>
<td>A lot of positive change</td>
</tr>
</tbody>
</table>
F. Increasing my support network to better address my child’s anxiety

<table>
<thead>
<tr>
<th>Negative change</th>
<th>No change</th>
<th>Some positive change</th>
<th>A lot of positive change</th>
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</table>

G. Feeling more comfortable when my child is anxious

<table>
<thead>
<tr>
<th>Negative change</th>
<th>No change</th>
<th>Some positive change</th>
<th>A lot of positive change</th>
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</table>

H. Feeling confident as a parent

<table>
<thead>
<tr>
<th>Negative change</th>
<th>No change</th>
<th>Some positive change</th>
<th>A lot of positive change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

I. Feeling hopeful as a parent

<table>
<thead>
<tr>
<th>Negative change</th>
<th>No change</th>
<th>Some positive change</th>
<th>A lot of positive change</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

6. Did you find the group format to be useful?
   a. Yes
   b. No

7. How satisfied are you with the amount of help you received in the group setting?
   a. Very satisfied
   b. Mostly satisfied
   c. Indifferent
   d. Quite dissatisfied

8. Was the 6-week format an adequate amount of time?
   a. Yes, the intervention was an appropriate length
   b. No, the intervention was too long
   c. No, the intervention was too short

9. If a friend were in need of similar help, would you recommend this intervention?
   a. Yes, definitely
   b. Yes, I think so
   c. No, I don’t think so
   d. No, definitely not

10. Is it your intention to keep addressing your child’s anxiety by targeting family accommodation in daily parenting life?
   a. Yes
   b. No
APPENDIX L

INTEGRITY CHECKLIST
Integrity Checklist

Session 1

- Group Facilitator Introductions
- Participant Introductions
- Group Expectations
- Introduce Workshop (i.e., inform parents that the workshop is aimed at child behaviors although the means to do this is through work with the parents)
  - “Why Parents?”
  - “Need for Active Steps & Hard Work”
  - “Unilateral Steps”
- Introduce “Anxiety”
  - Define Anxiety
  - Define SM
  - Discuss Primary Aspects of Anxiety
    - Breakout Activity – Examples of Relationship Among Aspects of Anxiety
- Introduce “Personal Boundary”
  - Review Relationship between Child Anxiety and Personal Boundaries
  - Assess Parents’ Current Personal Boundaries (3 Yes/No Questions)
- Introduce “Support”
  - Introduce Protective, Demanding, and Supportive Statements
  - Provide Examples of Statements
    - Breakout Activity – Rephrase Statements into Supportive Statements
- Introduce Homework

Session 2

- Week 1 Review
- Homework Survey
- Check In
- Introduce “Family Accommodation”
  - Define Concept
  - Provide Examples of Accommodation
  - Discuss the Accommodation Cycle
  - Define Helpful vs. Unhelpful Accommodation
    - Breakout Activity – Assess Current Accommodation/Support Level
- Mapping Accommodation
  - Introduce Rationale
  - Provide Example Map
    - Breakout Activity – Begin Accommodation Map
- Introduce Homework
Session 3

- Week 2 Review
- Homework Survey
- Check In
- Choosing a Target Problem
  - Rationale for Choosing One Target Accommodation
  - Criteria for Target Accommodation
  - Breakout Activity – Identify Target Accommodation
- The Announcement
  - Introduce Written Announcement
  - Purpose of Written Announcement
  - Common Responses to Written Announcement
  - Sample Announcement
  - Breakout Activity – Drafting Announcement
  - Presenting Announcement
  - Dealing with Child Reactions to Announcement
    - Argument, Debate, & Emotional Blackmail
    - Indifference, Ignoring, & Scorn
    - Distress
    - Aggressive or Disruptive Behavior
      - Rationale for “Delayed Response” to Disruptive Behavior
      - Introduce “Sit In”
- Introduce Homework

Session 4

- Week 3 Review
- Homework Survey
- Check In
  - Survey of Child Reactions
- Create a Plan
  - Introduce Components of Plan
  - Review Sample Plan
  - Breakout Activity – Create Individual Plans & Problem Solve Challenges
- Informing the Child
  - Review Procedure to Inform Child
  - Follow Up Announcement Sample
- Review Child Responses to Decreased Accommodation
- Introduce Homework
Session 5

- Week 4 Review
- Homework Survey
- Check In
  - Parent’s Success at Reducing Accommodations
  - Child’s Reactions to the Changes
- Reinforce Progress
  - Review What Progress Looks Like
- Overview of Reinforcement for Child
  - Define Reinforcement
  - Reasons for Reinforcement
  - Types of Reinforcement
  - Concerns about Reinforcement
- Group Problem Solve Difficulties to Create Modified Plans
- Recruiting and Engaging Supporters
  - Introduce Concept of Supporters
  - Review Roles of Supporters
  - Review Concerns Regarding Supporters
- Introduce Homework

Session 6

- Week 5 Review
- Homework Survey
- Check In
- Group Problem Solve Difficulties to Create Modified Plans
- Review Changes
  - Child Changes
  - Parent Changes
  - Skill Takeaway
- Discuss Future Steps
  - Immediate Next Steps
  - Next Goal/Target Parents Would Like to Achieve
  - Maintaining Gains
  - Future Exacerbations
- Study Logistics