ABSTRACT

Title of Dissertation:	GROUP INTERVENTIONS FOR SELECTIVE MUTISM IN A COMMUNITY SETTING: A PRELIMINARY EFFECTIVENESS-IMPLEMENTATION HYBRID STUDY
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Selective mutism (SM) is an anxiety disorder characterized by the failure to speak in specific situations in which speech is expected despite speaking in other settings. Although typically verbal at home, children with SM often vary their speech across other settings and will often use nonverbal communication. SM tends to remit before adulthood; however, a history of SM in childhood is associated with poor developmental outcomes, including continued psychopathology and social difficulties. Results from prior SM treatment research suggest that the disorder is difficult to treat, and many treatment programs are lengthy, which may significantly burden families. Recent efforts have been made in a university setting to treat children with SM using a short, intensive group formatting with promising results. However, many expert SM clinicians work in private practice and other community settings. Thus, it is important to evaluate the effectiveness of intensive group

treatment for SM in outpatient community settings. Importantly, intensive group treatment for SM (e.g., camps) may not be feasible for many families, and operating such programs may not be feasible for many community practices. Weekly group treatment for SM may be a more viable alternative, but its effectiveness is unknown. Understanding the effectiveness of intensive and weekly SM treatment programs, as well as factors related to their implementation in a community setting, may provide clinicians with valuable information to guide their service offerings and treatment recommendations. This study used a Type 1 hybrid effectiveness-implementation design to evaluate the preliminary effectiveness of intensive and weekly treatment programs for SM and to gather qualitative information from key stakeholders about potential barriers and facilitators to implementing these two program formats in an outpatient community private practice setting. Qualitative data from the current study suggest that key stakeholders find the group programs acceptable, appropriate, and feasible for the treatment of SM in community private practice settings. However, quantitative results are mixed. Case-level analyses of the intensive and weekly group programs reveal considerable variability such that only some children demonstrated clinically significant improvement. Results may support the intensive program as a possibly effective adjunct treatment program for children with SM and suggest limited clinical value for the weekly program in its current design.

GROUP INTERVENTIONS FOR SELECTIVE MUTISM IN A COMMUNITY SETTING: A PRELIMINARY EFFECTIVENESS-IMPLEMENTATION HYBRID STUDY

by

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Dedication

To my parents, Michael and Arlene Woods. Thank you for instilling in me a love of learning. From makeshift labs in my closet to this doctoral dissertation and everything in between, you were unwavering in your support of my pursuits. I couldn't have done this without you. Love you always.

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Chapter 1: Introduction

Selective Mutism: Characteristics, Etiology, and Developmental Course

Selective mutism (SM) is an anxiety disorder characterized by the consistent failure to speak in specific settings in which there is an expectation for speech despite speaking in other settings (American Psychiatric Association, 2013). SM is a relatively rare disorder, with prevalence rates ranging from 0.18-1.9% of children (Muris & Ollendick, 2015) and occurring slightly more often in females (Garcia, Freeman, Francis, Miller, & Leonard, 2004). SM generally emerges between the ages of 2 and 5 years (Muris & Ollendick, 2015), with diagnosis occurring, on average, around age 6.5 years (Ford, Sladeczek, Carlson, & Kratochwill, 1998). Speaking demands in school and social settings increase as children age; thus, the lag time between SM emergence and diagnosis may be due to a decrease in tolerance by parents and teachers for mutism as children enter elementary school.

Children with SM usually speak at home with family members but fail to speak in the presence of other persons or in other settings, like school or in the community. Speech frequency, volume, and spontaneity often differ across settings for children with SM (Ford et al., 1998). Most children with SM exhibit the greatest impairment in school (Steinhausen et al., 2006), where their mutism is most prevalent (Kehle & Bray, 2009). Rather than speaking, children with SM will often use nonverbal communication such as pointing or nodding (Ford et al., 1998).

The relative rarity of the disorder and lack of large-scale studies have hindered our ability to conceptualize and classify the disorder (Scott & Beidel, 2011). The

classification of SM in Other Disorders of Infancy, Childhood, or Adolescence in the third and fourth editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) tacitly implied that SM was unrelated to other disorders (Dummit et al., 1997). However, the convergence of research over the past several decades provides compelling evidence that SM and anxiety disorders are closely related (Muris & Ollendick, 2015; Sharp, Sherman, & Gross, 2007). Thus, SM was reclassified as an Anxiety Disorder in DSM-5 (APA, 2013). Indeed, SM is highly comorbid with other anxiety disorders and may share many of the same temperamental, environmental, and genetic risk factors as other anxiety disorders (Muris & Ollendick, 2015).

Studies of children with SM report comorbidity rates with social phobia, a disorder characterized by fear of social evaluation, that frequently approach or exceed 90% (e.g., Black & Uhde, 1995; Dummit et al., 1997; Manassis & Tannock, 2008), although only a small portion of children with social phobia meet diagnostic criteria for SM. In addition, almost 50% of children with SM also meet criteria for another anxiety disorder, excluding social phobia (Dummit et al., 1997). Additional comorbidities often include language impairments and developmental delays (Kristensen, 2000). Speech and language problems are common, occurring in 19-38% of samples of children with SM (Ford et al., 1998; Steinhausen & Juzi, 1996). Externalizing disorders among children with SM are similar to those found in community samples (Cunningham, McHolm, Boyle, & Patel, 2004). However, teachers reported fewer externalizing symptoms in children with SM compared to children without SM than parents did, suggesting that children with SM are more

inhibited in school than they are in the home setting, where they display more oppositional behaviors (Cunningham et al., 2004).

Much is still unknown about the etiology of SM and its developmental course. What is known comes from retrospective studies. In a retrospective cross-sectional study, Gensthaler et al. (2016) found that children with current or a lifetime history of SM had significantly higher parent-reported behavioral inhibition (BI; the tendency to withdraw when faced with unfamiliar people or events) in infancy than children with other internalizing disorders or healthy controls. Furthermore, children with a lifetime history of SM had significantly higher BI in infancy than children with social phobia. Thus, BI may be an early temperamental precursor to SM, though no prospective studies have been conducted to date.

Steinhausen, Wachter, Laimböch, and Metzke (2006) compared psychiatric outcomes among young adults who had a childhood history of SM, childhood history of other anxiety disorders, and non-anxious controls. Young adults with a history of SM were recruited from a pool of patients who had received psychiatric services. All children with SM showed improvement in mutism with age, with over 80% showing marked or total improvement. Interestingly, children appeared to follow two trends in improvements—those who showed stability in mutism across time until there was a sudden disappearance of symptoms in adolescence or young adulthood and those who showed a gradual decline in mutism over time. Although symptoms of SM tended to improve or remit before adulthood, young adults with a history of SM met criteria for phobic disorders (i.e., social, specific) and any psychiatric disorder significantly more than the control group (Steinhausen, Wachter, Laimböch, & Metzke, 2006). The

childhood SM and childhood anxiety groups did not differ from one another. In addition to high rates of psychiatric disorders, adults with a history of SM in childhood often exhibited deficits in social skills and communication, displayed high rates of social withdrawal, reported poor self-esteem and achievement motivation, and presented with psychosocial impairment, including high rates of unemployment (Remschmidt, Poller, Herpertz-Dahlmann, Hennighausen, & Gutenbrunner, 2001). Importantly, not all adults with a history of SM showed marked or complete improvement in mutism. Indeed, a follow-up study of 45 patients with SM (formerly called elective mutism) found that only 39% achieved full remission (Remschmidt et al., 2001). Steinhausen et al. (2006) found that, although 57% of their sample achieved total improvement, approximately 20% were only slightly improved. Using a sample of children and adults with self-reported SM, Ford et al. (1998) found that difficulties with social situations and speaking continued for over half of participants who denied current SM diagnoses. Thus, a history of SM is associated with continued psychopathology and impairment, even among those who experienced improvement in mutism symptoms over time and those who received psychiatric services.

SM Conceptualization and Treatment Considerations

The impairments experienced by children with SM, coupled with the poor outcomes of adults with a childhood history of SM, make SM a disorder for which treatment is warranted. Although treatment is needed, there are currently no well-established interventions for SM. In fact, the treatment literature for SM is dominated by case studies and single-case designs with small sample sizes (range 1-9; see Zakszeski & DuPaul, 2017 for a review). Although no large-scale trials have been

published, three small-scale randomized-controlled trials (RCTs) are currently in the literature.

A behavioral conceptualization of SM provides a framework from which to understand the maintenance of SM and from which to base intervention efforts (see Figure 1). Simply, when a speaking demand is placed on a child with SM, for example by a teacher, the child feels anxious and avoids responding. Subsequently, the teacher (or other individual) begins to feel distressed and removes the speaking demand from the child, thus decreasing the anxiety of the child and of oneself. The decrease in anxiety negatively reinforces the child's avoidance of speech and the other individual's "rescue" behavior. Indeed, a review of the extant literature found that the majority of published treatments used behavioral and/or systems approaches grounded in this conceptualization (Zakszeski & DuPaul, 2017), and a systematic review of the treatment literature suggests that behavioral treatments for SM are better than no treatment (Pionek Stone, Kratochwill, Sladezcek, & Serlin, 2002). Thus, behavioral interventions have been recommended as the treatment of choice for SM (Viana, Beidel, & Rabian, 2009).

Perhaps due to the high overlap between SM and social phobia and the lack of established interventions for SM, clinicians have used behavioral interventions originally designed for social anxiety to treat children with SM. For example, Fisak, Oliveros, and Ehrenreich (2006) used Social Effectiveness Therapy for Children modified for individual therapy in a case study. However, SM presents unique clinical challenges that may make the extension of previously established treatments for anxiety insufficient for the treatment of SM (Bergman, Gonzalez, Piacentini, &

Keller, 2013). First, the onset of SM is typically during the preschool years; thus, treatment needs to be developmentally appropriate for very young children. Second, children with SM often fail to speak to the clinician early in treatment, rendering engagement strategies and/or parental involvement at the start of treatment a necessary component of treatment. Third, children with SM tend to be symptomatic outside of the home (e.g., at school or in the community); thus, efforts must be made to facilitate generalization to other settings.

Prior SM Treatment Research: Individual Therapy

Several interventions have been developed in recent years in an attempt to address the unique challenges of treating children with SM. The majority of these interventions were designed to be implemented with individual children. For example, Integrated Behavioral Therapy for SM (IBTSM; Bergman, 2013) was designed and tested in a small, randomized controlled study within a university-based clinic (Bergman et al., 2013). Twenty-one children ages 4-8 were randomized to treatment (n = 12) or a 12-week waitlist control group (WLC; n = 9). Twenty treatment sessions delivered over 6 months to individual children relied heavily on parent and teacher involvement to implement exposures. Treatment focused on graded exposures and contingency management. At 12 weeks (treatment mid-point), children in the treatment group showed significant improvements on parent-rated SM and social anxiety and teacher-rated SM compared to WLC (range $\eta^2_{partial}$ = .23-.41). The groups did not differ at 12 weeks on a teacher-administered story retell task (measure of verbalizations), nor did either group demonstrate improvement on teacher-rated social anxiety. At 24-weeks (full course of treatment), 8 of 12 children

in the treatment group no longer met criteria for SM based on parent-report diagnostic interviews. Further, compared to baseline, treated children showed improved scores on parent-rated SM and social anxiety and teacher-rated SM (range $\eta^2_{partial}$ = .48-.74). Teacher-rated social anxiety did not significantly improve. Treatment effect sizes after a full course of the intervention ranged from medium to large, and gains were maintained at 3-month follow-up. Notably, children were excluded from the study if they had failed a trial of cognitive-behavioral therapy for anxiety in the past two years or if they were treated with pharmacotherapy.

Oerbeck, Stein, Wentzel-Larsen, Langsrud, and Kristensen (2014b) developed a 3-month school-based intervention for the treatment of individual children between the ages of 3-9 years old with SM in Norway. Defocused communication, developed by the intervention developers, served as a guiding treatment principle. Defocused communication includes sitting next to (not across from) the child, refraining from asking direct questions, responding to verbal answers neutrally rather than praising verbalizations, continuing conversations with the child even in the absence of child speech, and focusing on an activity instead of the child. Although defocused communication may not be fully grounded in behavior theory, graduated exposures and contingency management—two common behavioral intervention techniques—were also used. Following three in-home sessions, therapists conducted school sessions twice per week for 30 minutes. Twenty-four children were randomized to treatment or WLC. At post-treatment, treated children exhibited significant improvement on teacher-rated SM compared to WLC. Compared to WLC, treated children also showed significant improvements in mother-reported total SM

(combined speech across home/family, school, and public/social settings) and SM at school; there were no group differences on mother-rated SM at home or in public. Importantly, scores on both parent and teacher-rated SM indicate that children spoke between "never" and "seldom" in the school setting prior to treatment and improved to speaking "seldom" at the end of 3 months of treatment. Thus, after several months of twice-weekly in-school therapy sessions, children showed some improvements in speaking behavior, but still experienced significant difficulties verbalizing at school. Follow-up studies by Oerbeck, Stein, Pripp, & Kristensen (2014a) conducted after an additional 3 months of treatment (for a total of 6 months of treatment) showed similar effects; and these small gains were maintained up to 5 years after treatment (Oerbeck, Overgaard, Stein, Pripp, & Kristensen, 2018). Importantly, many of the children treated with the school-based intervention continued to meet diagnostic criteria for SM 1 year and 5 years after treatment, and many children who no longer met criteria for SM met criteria for social phobia.

Although the randomized-controlled trials by Bergman and Oerbeck resulted in some improvements in SM symptoms, each intervention required a significant time commitment to complete, as treatments were delivered once or twice per week over the course of 3-6 months. In an effort to reduce the length of treatment time, Klein, Armstrong, Skira, & Gordon (2017) developed a shorter, more intensive intervention for SM. Klein and colleagues (2017) conducted an open trial of Social Communication Anxiety Treatment (S-CAT) for the treatment of SM, which consisted of three sessions held three weeks apart. The feasibility of S-CAT was assessed with a sample of 40 children with SM aged 5-12 years. Treatment included

psychoeducation with parents, working with the child on shaping/exposure to a hierarchy of speech sounds (from phonemes to more complex sounds), teaching parents to generalize therapy activities, providing information to teachers/school staff, and gradual exposures to feared social communication situations. Between sessions, clinicians were available by phone and email for consultation. Parents rated child speech at each treatment session and six weeks after the final session. Treatment effect sizes on parent-rated speech overall, at school, with family, and in public/social situations from baseline to 6-week follow-up were large (range $\eta^2_{partial}$ = .25-.54). Results suggested that children's speaking significantly increased across all nine weeks of treatment and at follow-up on parent-rated speaking at home, in public/social, and overall. Although speech increased on parent-rated school speaking behavior at each time point, the change was not statistically significant. Importantly, although children's speech improved in school and public/social settings, ratings indicate that speech, on average, occurred only seldomly in these settings following treatment. No teacher-report of child speaking behavior was collected. Treatment also resulted in significant reductions in child anxiety and withdrawal on the parent-rated Child Behavior Checklist (Achenbach & Rescorla, 2000; 2001). Results of the study also suggested that initial symptom severity, but not duration of SM, was associated with treatment outcome such that less severe SM was associated with greater treatment gains. This study suggests that briefer interventions (i.e., 9 weeks vs. 3-6 months) can be beneficial for children with SM, although improvements may be limited and significant difficulties with speaking may remain.

Recently, Catchpole, Young, Baer, and Salih (2019) demonstrated the efficacy of a parent-child interaction therapy-informed SM intervention for 4-10 year-old children using a within-subject, waitlist-controlled design. Thirty-one families were recruited from a children's hospital in Canada. Families received 16 one-hour sessions, conducted over no more than 22 weeks. Three of the 16 sessions were conducted with the child's school. Treatment consisted of four modules: parent coaching in child-directed and verbal-directed interactions, office-based exposures, school visits to provide teacher training and child practice, and daily parent-led exposures in the community. Treatment was led by a clinical psychologist and child psychiatrist. Baseline assessments were conducted by the hospital's outpatient clinic; additional pre-treatment assessments were conducted by the research team. Treatment outcomes were assessed at post-treatment, 3-month follow-up, and 1-year follow-up. Results indicate improvement from pre-treatment to post-treatment in parent-reported child speaking and impairments at home, school, and in the community. Improvements in speaking were maintained at both 3-month and 1-year follow-ups. Parents also reported improvements in child anxiety from pre-treatment to post-treatment and 3-month and 1-year follow-ups. Notably, teachers also reported improvements in speaking from pre-treatment to post-treatment, and observational data showed increases in child speaking behaviors during a structured observation from baseline to post-treatment and 3-month follow-up. This study provides preliminary evidence that PCIT-SM may be effective for the treatment of SM, highlighting the importance of involving therapists, educators, and parents in treatment.

Prior SM Treatment Research: Group Therapy

Currently, the dominant model of psychotherapy for SM is weekly individual therapy that spans many months to several years. In an effort to extend reach and reduce the burden of mental illnesses, other models of treatment delivery are needed (Kazdin & Blase, 2011). Interventions for child anxiety have been successfully implemented using a group format. Given that children with SM inherently experience significant impairment in social contexts, a group format may be particularly helpful for SM given the inherent opportunity for repeated exposures with peers and therapists in the context of treatment, opportunities for others to model desired behaviors, and opportunities for children to interact with their peers (Beidel & Turner, 2007; Kazdin, 1994).

A small open trial study examined weekly group therapy for SM. Sharkey, McNicholas, Barry, Begley, & Ahern (2008) examined the feasibility and effectiveness of weekly 90-minute group sessions delivered over the course of 8 weeks with five 5-8 year old children with SM and their parents. The treatment included concurrent child and parent groups. The children's group was developed from a cognitive-behavioral approach. Children received psychoeducation and relaxation training, and completed behavioral tasks and hierarchical exposures with a reward system. The parent group consisted of psychoeducation, information about managing SM, how to alter their own behavior to facilitate children's speech, and how to reduce their own anxieties. Parents were assigned homework in order to generalize children's speaking behaviors outside of the home in a gradual manner. Following treatment, children showed improvements in clinician-rated functional

impairment, parent-rated SM severity, child-rated anxiety, and clinician-rated communication. Additionally, two children no longer met criteria for SM, although it is unclear what diagnostic assessment method was used. At 6-month follow-up, two children continued to no longer meet criteria for SM, four children maintained clinician-rated improvements on the Clinical Global Impressions Scale, and three children were in the non-clinical range on the clinician-rated Clinical Global Assessment Scale. This small, open-trial pilot study by Sharkey et al. (2008) demonstrates that group treatment may be a feasible and effective treatment modality for children with SM. However, very little detail was provided regarding assessment methodology, no parent-report data were available for follow-up, and no teacher-report data were available at any time point. Thus, more rigorous trials of group interventions for SM are needed to establish the efficacy and effectiveness of the treatment modality.

Recently, a small RCT (n = 29) examined Intensive Group Behavioral Treatment (IGBT) for 5-9 year-old children with SM conducted in a university setting (Cornacchio et al., 2019). IGBT is an intensive group behavioral treatment program that draws from Parent-Child Interaction Therapy (PCIT; Carpenter, Puliafico, Kurtz, Pincus, & Comer, 2014) and the Brave Buddies/Mighty Mouth programs (kurtzpsychology.com). IGBT mimicked summer camp and school settings (e.g., camp activities and school activities), in which children with SM are likely to be impaired. Treatment was delivered over the course of 6-8 hours per day for five consecutive days over the summer. Parents participated in a total of 8 hours of group parent training during the first four days of treatment. Each child was paired with a

counselor for the duration of the treatment week. Counselors employed a variety of treatment techniques including reinforcement, prompting, shaping, stimulus fading, graduated exposure, social skills training, cognitive strategies, relaxation training, and modeling. Children in the RCT were randomized to immediate IGBT or a 4-week waitlist control group, after which all children were offered IGBT and data from all treated children were pooled for subsequent analyses. At the 4-week assessment, compared to the waitlist control group, half of children in immediate IGBT were classified as treatment responders, defined as receiving a Clinical Global Impressions-Improvement Scale score of 1 (very much improved) or 2 (much improved) from masked independent evaluators. Also compared to the waitlist control group, immediate IGBT children also showed significant improvements on parent-rated SM symptoms in social settings and on independent evaluator-rated social anxiety severity and global functioning at the 4-week assessment (range d = .28-.73). There were significant improvements in parent- and teacher-rated speech at school from baseline to follow-up (2 months into school year) for the pooled sample. There were also significant decreases in independent-evaluator rated SM and social anxiety severity, increases in independent-evaluator rated global functioning, decreases in overall anxiety on parent-report Child Behavior Checklist (Achenbach & Rescorla, 2000; 2001), and improvement in parent-reported speaking in home and social settings. The results of IGBT are promising and provide evidence for the efficacy of intensive group treatment for children with SM but await replication in a larger sample.

Research Gaps

Results from prior SM treatment research suggest that the disorder is difficult to treat. Although most treatments resulted in some improvements in child speech, these improvements were often limited and many children continued experiencing significant symptoms of SM and symptoms of social anxiety. Furthermore, these limited treatment gains occurred during the course of lengthy treatments, which may place a significant burden on families.

Recently, efforts by Cornacchio et al. (2019) have been made to treat children with SM in social contexts using a brief, intensive format with promising results. The study was conducted in a university clinic setting with sliding scale fees, easy access to facilities suitable to the camp-like program, and readily available student and doctoral student clinicians who served as counselors. The majority of self-identified experts in the treatment of SM, however, work in private practice settings (see the Selective Mutism Association's list of providers on selectivemutism.org). Thus, it is important to evaluate not only the effectiveness, but also implementation factors (e.g., feasibility) related to providing intensive group treatment for SM in community (i.e., private practice) settings in which many expert SM clinicians work.

The Cool, Confident and Courageous Kids Camp ("SM Intensive") is an intensive behavioral intervention for the treatment of SM in 4-13 year-old children that is offered in a community private practice setting. IGBT and SM Intensive are both based on PCIT-SM (Carpenter et al., 2014) and the Brave Buddies/Mighty Mouth program (kurtzpsychology.com). Thus, IGBT and SM Intensive share many treatment components and guiding treatment principles. The SM Intensive includes a

one-week treatment camp, a 2-hour group parent education session, and (optional) individual in-school generalization sessions following the camp for a separate fee. The SM Intensive's treatment week is uniquely and strategically offered in middle to late August in order to build children's speaking momentum and confidence directly before starting a new school year. To build on this momentum and increase the likelihood of generalizing treatment gains to the classroom, parents are encouraged to schedule in-school generalization sessions at the beginning of the school year with SM Intensive clinicians or other therapy providers, but these are not required.

Given the time and cost commitment of participating in an intensive treatment program in a private practice setting in the community, programs like SM Intensive are likely not feasible for many families. Furthermore, operating programs like SM Intensive may not be feasible for other practice settings due to factors associated with running the program (e.g., coordination time, space and personnel constraints, cost). Thus, it is important to evaluate treatment alternatives. One alternative to SM Intensive is an SM Weekly Group program. Although Sharkey et al. (2008) conducted an open trial of a weekly group treatment for children with SM, significant methodological issues limit how well the effectiveness of their program can be understood (e.g., little information about assessment methodology, no parent-report at follow-up). Therefore, additional research on weekly group therapy for SM is needed to establish the modality as an effective and feasible treatment option in community private practice settings. The SM Weekly Group program operates on the same treatment principles and uses the same treatment techniques as SM Intensive but is offered to children two hours per week for four weeks. The SM Weekly Group

program is held periodically throughout the school year for developmentally-appropriate age cohorts (e.g., school-aged, preschool-aged, adolescents).

While group treatment formats help to extend reach and reduce mental health burdens, an understanding of how these programs are implemented in community settings is needed in order to foster and expand the availability of treatment. APA defines evidence-based practice as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences," and urges clinicians to use evidence-based practice when making clinical decisions (APA, 2006). However, the decades' long research-practice gap highlights the rarity with which clinicians incorporate research evidence into clinical practice. Although use of research in clinical practice may vary across clinicians' theoretical orientations, with cognitive-behavioral therapists reporting greater incorporation of research, the majority of clinicians heavily rely on their own clinical experiences to inform practice (Stewart & Chambless, 2007). Furthermore, clinicians tend to reject research evidence when it differs from their experience. Today, it is argued that the research-practice gap is one of the most critical issues facing child and adolescent mental healthcare. Indeed, perceptions that an evidence-based intervention is not compatible with existing clinical practice or in an existing setting are among the many identified reasons for this gap. This study directly addresses this issue by examining key stakeholder views on early implementation factors including appropriateness, acceptability, and feasibility for the SM Intensive and SM Weekly Group.

Given the preliminary efficacy of a program similar to the SM Intensive in a university setting (i.e., Cornacchio et al., 2019), similar effectiveness in a community

setting may be expected. Thus, from a research-practice gap perspective, it is highly encouraging that the SM Intensive has gained a foothold in another setting type (i.e., community setting vs. university setting). To date, no SM treatment studies have evaluated intervention implementation, although it is possible to address questions related to a program's delivery and implementation while simultaneously evaluating effectiveness. By blending effectiveness trials with implementation trials, the lag time between research and routine update may be reduced.

Effectiveness-implementation hybrid designs allow for questions related to a program's implementation to be evaluated comprehensively and accurately while notably earlier than is possible when intervention studies and implementation studies are conducted sequentially using intervention-then-preliminary-implementation study designs (Curran, Bauer, Mittman, Pyne, & Stetler, 2012). Hybrid designs vary in the degree to which they highlight effectiveness, implementation, or both (Curran et al., 2012). Type 1 hybrid designs are useful in evaluating patient response to intervention and evaluating feasibility and acceptability of intervention implementation with qualitative methods (Bernet, Willens, & Bauer, 2012). Thus, Type 1 hybrid designs emphasize effectiveness while gathering descriptive information about intervention delivery that can be used to improve future implementation efforts. Type 1 hybrid designs are appropriate when an intervention is likely to be effective in a target setting, with a specific population, or using a target delivery method, and when the intervention poses no more than minimal risk. This type of design can be used to evaluate the effectiveness of the SM Intensive and Weekly treatment programs while also gathering valuable information related to program implementation that may help

clinicians and patients determine which program format best suits their interests and can be implemented and sustained in their setting (e.g., in a private practice).

Evaluating key stakeholder perceptions of SM Intensive and SM Weekly Group appropriateness, acceptability, and feasibility may highlight factors that encourage clients to seek the treatment and providers/agencies to offer and maintain the service. Furthermore, this line of research has the potential to inform broader implementation efforts to additional treatment settings (e.g., community clinics, schools).

Current Study

Currently, the effectiveness of intensive group treatment for SM (i.e., SM Intensive) in an outpatient community setting is unknown. Given the complexity of the SM Intensive, many practices may be unable to provide the service, and programs like the SM Intensive may be cost prohibitive for many families. An alternative format, SM Weekly Group, may be more feasible for community practices to run and for families to complete. However, the effectiveness of SM Weekly Group is also currently unknown. Importantly, no research to date has begun to examine the implementation of group treatment programs for SM; thus, factors related to the facilitation or impediment of the programs, from the perspective of families, clinicians, and practice owners, are not yet understood. Understanding the effectiveness of the SM Intensive and SM Weekly Group programs, as well as factors related to their implementation in an outpatient community setting, may provide clinicians with valuable information to guide their service offerings and treatment recommendations. To address these gaps, this study uses a Type 1 hybrid

effectiveness-implementation design to evaluate the effectiveness of the SM Intensive and SM Weekly Group programs and to gather qualitative information from key stakeholders (e.g., parents, clinicians, practice owner) about potential barriers and facilitators to implementing these two program formats in an outpatient community practice setting, where many SM experts work. The proposed study will be conducted in two parts.

Proctor and colleagues (2011) define implementation outcomes as "the effects of deliberate and purposive actions to implement new treatments, practices, and services." Critically, these outcomes are distinguishable from effectiveness outcomes, like SM symptomatology and impairment. The current study defines implementation outcomes in line with those delineated by Proctor et al. (2011). Specifically, the current study examines acceptability, appropriateness, and feasibility. Acceptability is defined as "the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory." Appropriateness is defined as "the perceived fit, relevance, or compatibility of the evidence- based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem." Feasibility is defined as "the extent to which a new treatment can be successfully used or carried out within a given agency or setting."

The pilot study (Study 1) was conducted between Summer 2018 and Fall 2018. The aim of Study 1 was to assess the feasibility of implementing university-based research study protocols within the clinical practice setting. Study 2 built upon Study 1 by using quantitative and qualitative methods to assess the effectiveness and implementation of the SM Intensive and SM Weekly Group programs in a

community practice setting using a Type 1 hybrid design. Specifically, Study 2 has the following aims and hypotheses:

Aim 1: To evaluate the preliminary effectiveness of SM Intensive and Weekly group therapies by assessing diagnostic status, symptoms, and impairment, prior to and following treatment.

Hypothesis 1A: Both the SM Intensive and Weekly therapies will result in a clinically significant reduction in SM and Social Phobia severity and diagnostic status from pre-treatment to 6-week follow-up based on parent diagnostic interview.

Hypothesis 1B: Both the SM Intensive and Weekly therapies will result in reductions in SM symptoms from pre-treatment to post-treatment and 3-month follow-up on parent and teacher report questionnaire measures of SM symptoms.

Hypothesis 1C: Both the SM Intensive and Weekly therapies will result in reductions in functional impairment from pre-treatment to post-treatment and 3-month follow-up on parent and teacher report measures of SM-related impairment.

Effect sizes will be reported for each treatment program. Differences in effect sizes between the SM Intensive and SM Weekly Group programs will be explored.

Aim 2: To evaluate potential barriers and facilitators to implementing the SM Intensive and Weekly group therapies in an outpatient community practice setting based on qualitative interviews with key stakeholders.

Aim 2A: To evaluate the acceptability of the SM Intensive and Weekly therapy formats using qualitative interviews and surveys to assess parent, counselor, and supervisor/developer perceptions of program acceptability, whereby acceptability is

defined as “the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory (Proctor et al., 2011).”

Aim 2B: To evaluate the appropriateness of the SM Intensive and Weekly therapies for the treatment of SM using qualitative interviews to assess parent, counselor, and supervisor/developer perceptions of program appropriateness, whereby appropriateness is defined as “the perceived fit, relevance, or compatibility of the evidence based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem (Proctor et al., 2011).”

Aim 2C: To evaluate the feasibility of implementing the SM Intensive and Weekly therapies using qualitative interviews to assess supervisor/developer and agency-level perceptions of program feasibility, whereby feasibility is defined as “the extent to which a new treatment can be successfully used or carried out within a given agency or setting (Proctor et al., 2011).”

Chapter 2: Method

Study 1: Pilot and Feasibility Trial

Study 1 was conducted to pilot the feasibility of study protocols within the clinical practice.

Participants. Participants included 7 children aged 4-9 years old who enrolled in the SM Intensive Camp at Alvord, Baker & Associates, LLC ("Alvord Baker") during Summer 2018. Children were eligible for participation in the study if, based on unstructured clinical assessment with program clinicians, they had impairing symptoms of SM as a primary concern and made at least one verbalization to a program clinician prior to the start of the program[1]. All children enrolled in the study had a parent who could complete study measures in English. Each child's teacher was also invited to participate in the study with parent permission. Children were not excluded if his/her teacher did not participate.

Practice Setting. Alvord Baker is a private psychotherapy practice with locations in Chevy Chase and Rockville, Maryland. The practice does not participate in insurance plans. Reflecting the demographics of the surrounding DC-metropolitan area, the practice serves a racially diverse population; however, clients are typically middle and upper-middle class. The majority of clinicians at Alvord Baker hold Ph.D.'s in clinical psychology. Alvord Baker is home to one of the only SM programs in the state, directed by clinicians with expertise in the treatment of SM. The SM Program at Alvord Baker is broadly based on the Parent-Child Interaction Therapy-SM Model developed by Steve Kurtz, Ph.D. (Carpenter et al., 2014; Cotter, Todd, & Brestan-Knight, 2018).

Procedure.

Pre-treatment assessment. Approximately 3-4 weeks prior to the start of camp, Alvord Baker sent parents an enrollment packet to complete. This packet included the Spence Anxiety Scale (SAS; Spence, 1998; Spence, Rapee, McDonald, & Ingram, 2001), parent-report Selective Mutism Questionnaire (SMQ; Bergman, Keller, Piacentini, & Bergman, 2008), teacher-report School Speech Questionnaire (SSQ; Bergman, Keller, Wood, Piacentini, & McCracken, 2001), and parent- and teacher-report Behavior Assessment System for Children-Third Edition (BASC-3; Reynolds & Kamphaus, 2015). Parents also completed a treatment history form. Parents signed a release form allowing the University of Maryland research team access to the enrollment packet. Also as part of the pre-treatment assessment, parents completed the Anxiety Disorders Interview Schedule for DSM-5 Selective Mutism module (ADIS; Albano & Silverman, 2014) with an advanced doctoral student in clinical psychology, and a general demographics questionnaire. The demographics form was made available using REDCap, a web-based application used for the confidential collection of forms and questionnaires. Parents received a $10 gift card for completing the pre-assessment. The University of Maryland Institutional Review Board approved all study procedures.

Intervention. Children enrolled in the SM Intensive program receive 25 hours of intensive therapy over the course of one week (i.e., 5 hours per day for 5 days). Exposure and contingency management are key treatment components in the SM Intensive program. Each child is paired with a counselor ("Brave Buddy") for the duration of the camp week. Counselors are typically volunteer undergraduate or post-baccalaureate students interested in psychology or graduate students enrolled in

master's or doctoral degree programs in psychology or psychology-related fields. Counselors attend a 3-hour training with the program developers to learn about SM and practice program skills. Counselors are trained to fluidly transition between the use of PCIT child-directed interaction skills (i.e., praise, behavior descriptions, and reflections) and verbal-directed interaction skills (i.e., effective questions) to promote child speech with the counselor, other adults, and peers across various contexts (Carpenter et al., 2014). This counselor-child pairing ensures high levels of individualized therapy and continuous therapeutic contact within a group treatment program (10-15 children per group). The program developers provide in-vivo supervision throughout the treatment week and lead group activities.

Each day, children engage in group activities (i.e., art projects) and generalization activities (i.e., checking out a library book, ordering food) as well as activities that mimic the classroom environment (i.e., circle time, show and tell).

During the camp week, parents are encouraged to attend a 2-hour parent session hosted by the SM Intensive developers/directors. During this group meeting, parents are provided with psychoeducation about SM, which includes information about the disorder, fade-in process and procedures, development of 504 plans, intervention goals, and the use of rewards. During this session, parents are also taught the child-directed interaction and verbal-directed interaction skills, and practice using the skills with one another with clinician feedback.

It is highly recommended that parents opt for in-school generalization sessions that occur at the beginning of the child's school year. At enrollment in the SM Intensive, parents sign that they understand that these sessions are part of standard

protocol to generalize speech to the new teacher, but as the generalization sessions are an additional cost to the camp week fee, the sessions are ultimately optional. A SM Intensive clinician, counselor, or another one of the child's therapy providers (independent of SM Intensive) conducts the sessions.

Post-treatment assessment. Post-assessment occurred two to four weeks after treatment. At post-assessment, the child's parent completed the SMQ and SAS, and detailed any therapy and/or pharmacotherapy received by the child since the end of the SM Intensive, including in-school generalization sessions. Parents also completed the Client Satisfaction Questionnaire (CSQ-8; Larsen, Attkisson, Hargreaves, & Nguyen, 1979) as an assessment of treatment satisfaction. Teachers were asked to complete the SSQ. Parent and teacher forms were administered via REDCap. Parents received a $10 gift card for completing the post-assessment and teachers received a $5 gift card.

Follow-up assessment. Follow-up assessments were conducted three months after intensive treatment program ended. Parents completed the SMQ and SAS and provided updates about any therapy and/or pharmacotherapy received by the child. Teachers were asked to complete the SSQ. Parent and teacher forms were administered via REDCap. Parents received a $10 gift card and teachers received a $5 gift card for completing the follow-up assessment.

Measures. The Anxiety Disorders Interview Schedule for DSM-5 (ADIS; Albano & Silverman, 2014) is a clinical interview that assesses DSM-5 symptoms of anxiety disorders. Parents completed the SM module of the ADIS with a doctoral

student in clinical psychology who received extensive training on administering the ADIS, under the supervision of a licensed clinical psychologist. A clinician severity rating (CSR) for SM was determined for each child. CSRs are assigned on a 0-8 scale, with higher CSRs indicating more severe pathology and impairment. A CSR of 4 indicates that the child is impaired and meets diagnostic criteria for SM.

The Selective Mutism Questionnaire (SMQ) is a 23-item parent-report questionnaire that assesses children's failure to speak related to SM (Bergman et al., 2008). The SMQ was designed for use with children ages 3-11 years. Across school, home/family, and other public/social situations, parents rate the frequency with which their children speak on a 4-point scale (*always*, *often*, *seldom*, *never*), with lower scores indicating lower frequencies of speech. Six individual items on the SMQ assess impairment and distress across various domains. The SMQ demonstrates excellent internal consistency: Total scale (α = .97), School (α = .97), Home/Family (α = .88), and Public/Social (α = .96) (Bergman et al., 2008). The measure also demonstrates convergent and discriminant validity and is sensitive to treatment change (Bergman et al., 2008). In the present sample, internal consistency for the SM Intensive were as follows: Total scale (α = .81), School (α = .85), Home/Family (α = .76), and Public/Social (α = .94). For the SM Weekly Group, internal consistencies were: Total scale (α = .94), School (α = .84), Home/Family (α = .79), and Public/Social (α = .95).

The School Speech Questionnaire (SSQ) is a modified version of the SMQ designed for use with teachers regarding speaking behaviors in the school setting (Bergman et al., 2001). The SSQ is an 8-item measure; 6-items are used to derive the

factor sum score. Teachers rate the frequency of child speaking behaviors on a 4-point scale (*always, often, seldom, never*), with lower scores indicating lower frequencies of speech. The SSQ shows some clinical utility in evaluating symptom improvement following intervention and demonstrates acceptable internal consistency (Bergman et al., 2013; Oerbeck et al., 2018). Internal consistency for the SM Intensive sample was $\alpha = .77$ and for the SM Weekly Group sample was $\alpha = .53$.

The Spence Preschool Anxiety Scale (ages 3-6 years) and Spence Children's Anxiety Scale (ages 7-13 years) are parent-report measures of a broad range of children's anxiety symptoms. The Spence Preschool Anxiety Scale asks parents to rate how "true" a symptom is for their child on a 5-point scale (not at all true, seldom true, sometimes true, quite often true, very often true). The Preschool Anxiety Scale yields a total score and subscales for social anxiety, generalized anxiety, separation anxiety, physical injury fears, and obsessive-compulsive disorder. The Preschool Anxiety Scale has strong internal consistency ($\alpha = .72$-$.92$) (Spence, Rapee, McDonald, & Ingram, 2001). For the current study, the social anxiety and total anxiety scales of the Preschool Anxiety Scale were used. Internal consistencies for the SM Intensive were as follows: Social Anxiety ($\alpha = .82$) and Total Anxiety ($\alpha = .95$). For the SM Weekly Group, internal consistencies were: Social Anxiety ($\alpha = .92$) and Total Anxiety ($\alpha = .78$). Similarly, the Spence Children's Anxiety Scale (Spence, 1998) asks parents to rate how often their child experiences symptoms of anxiety on a 4-point scale (never, sometimes, often, always). The Spence Children's Anxiety Scale also yields a total score and subscales for social anxiety, generalized anxiety, separation anxiety, physical injury fears, and obsessive-compulsive disorder, but also

includes a panic attack/agoraphobia subscale. Internal consistencies for the Spence Children's Anxiety Scale range from α = .83-.92 (Nauta et al., 2004). Both versions of the measure have an average T-score of 50 and a standard deviation of 10. A T-score of 60 on either version indicates sub-clinical or elevated levels of anxiety. For the current study, social anxiety and total anxiety scales were used. For the SM Intensive, internal consistencies were: Social Anxiety (α = .81) and Total Anxiety (α = .95). For the SM Weekly Group, internal consistencies were: Social Anxiety (α = .88) and Total Anxiety (α = .90).

The Behavior Assessment System for Children, Third Edition (BASC-3; Reynolds & Kamphaus, 2015) is a parent- and teacher-reported comprehensive measure of children's behavior and functioning. Items are rated on a 4-point scale (*never, sometimes, often, almost always*). Items reflect externalizing and internalizing problems, behavioral symptoms, developmental social disorders, and adaptive skills.

The Client Satisfaction Questionnaire (CSQ-8; Larsen et al., 1979) is an 8-item self-report measure of patient satisfaction. The CSQ-8 has been correlated with symptom change, treatment dropout, and treatment attendance. The measure has demonstrated high levels of internal consistency (>.80; Attkisson & Greenfield, 1996). The CSQ-8 has been used in previous pilot studies of novel group interventions for child anxiety (e.g., Santucci & Ehrenreich-May, 2013). The internal consistency of the CSQ-8 for the SM Intensive was α = .92 and for the SM Weekly Group was α = .91.

Study 2: Evaluation of SM Intensive and Weekly Programs

Study 2 used quantitative and qualitative methodologies to evaluate the effectiveness and implementation of SM Intensive and Weekly treatment program formats in the community practice setting.

Participants. Seven participants, ages 4-13, enrolled in the 2019 SM Intensive and 8 participants, ages 4-9 enrolled in the SM Weekly Groups. See Table 2 for demographic information.

Children were eligible for these treatment programs if, based on unstructured clinical assessment, they had impairing symptoms of SM as a primary concern and made at least one verbalization to a program clinician prior to the start of the program. Children with prior diagnoses of an autism spectrum disorder, developmental delay, or communication disorder were included if the disorders were mild and, based on consultation with practice clinicians, were not thought to interfere with treatment. Two children in the 2019 SM Intensive had an autism spectrum disorder or pragmatic communication disorder per parent report. No children in the SM Weekly Groups had parent-reported autism or communication disorders.

Practice Setting. See Study 1 for a description of Alvord, Baker & Associates, LLC ("Alvord Baker"). The SM Intensive in 2019 was operated by Alvord Baker under the direction of both SM Program Directors. Notably, in Fall 2019, one SM Program Director began her own practice (Brighter Outlook Cognitive Behavioral Therapy, LLC or "Brighter Outlook") in Bethesda, Maryland, with plans to continue partnering with Alvord Baker for SM-related programs. Both cohorts of the SM

Weekly Group were conducted at Brighter Outlook, following the same intake and treatment procedures as Alvord Baker. Similar to Alvord Baker, all patients enrolled in the SM Weekly Group at Brighter Outlook were self-pay clients. Rates for the SM Weekly Group at Brighter Outlook were approximately the same as rates for SM Weekly Groups held at Alvord Baker (~$200-$210/session).

Procedure.

Pre-treatment assessment. The pre-assessment period occurred in the 2-3 weeks prior to the beginning of the SM Intensive or SM Weekly Group program. Parents completed the Behavior Assessment System for Children-Third Edition (BASC-3), Selective Mutism Questionnaire (SMQ; for the School subscale, parents were asked to recall child speaking behavior at the end of the previous school year), and Spence Anxiety Scale (SAS). Parents also completed treatment history and demographics forms (see Table 1 for measures administration schedule). Pre-assessment included the parent-report Anxiety and Disorders Interview Schedule (ADIS) for DSM-5 Selective Mutism and Social Phobia modules. All forms and questionnaires were completed online using REDCap, a web-based application used for the confidential collection of surveys. The ADIS interview was conducted via phone by an advanced clinical psychology doctoral student under the supervision of a licensed clinical psychologist. Teachers were asked to complete the School Speech Questionnaire (SSQ) via REDCap. For the SM Intensive, teachers from the previous school year were asked to complete the SSQ retrospectively recalling child speaking behavior at the end of the school year.

SM Intensive Program. For a detailed description of the SM Intensive program, see the description presented in Study 1.

SM Weekly Group Program. The SM Weekly program met two hours per week for 4 weeks.

The SM Weekly Group intervention is similar in structure to the SM Intensive program (see SM Intensive program description in Study 1) and shares the SM Intensive program's guiding treatment principles (e.g., child directed interaction (CDI), verbal directed interaction (VDI), exposure, contingency management). Each child is paired with a "Brave Buddy" for the duration of the intervention; thus, children in the SM Weekly Group program receive high levels of individualized attention. An SM program director leads each group and provides ongoing in-vivo supervision. The SM Weekly Group enrolls up to 5 children per cohort. Separate group cohorts are conducted for preschool-aged children (4-6 years), school-aged children (6-10 years), and adolescents (11-14 years). Although the exact age composition of each group cohort varies depending on client interest at the time the group begins, groups are formed to be developmentally appropriate. Over the course of treatment, children participate in age-appropriate group activities (e.g., Go Fish, HedBanz, or Mad Libs), generalization activities (e.g., checking out a library book, ordering at Starbucks), and school-like activities like circle time.

Although treatment principles and methods are the same across the SM Intensive and Weekly programs, children enrolled in the SM Weekly Group intervention receive a total of 8 hours of group intervention over the course of 4 weeks (i.e., 2 hours per week vs. 25 hours within one week in the SM Intensive). The

SM Weekly Group intervention is offered during the school year, and parents may opt for program staff to do school fade-in sessions during or after the program. Importantly, the SM Weekly Group program was offered as 1 hour per week over the course of 8 weeks prior to Fall 2019. Prior to Fall 2019, the SM Weekly Group did not include a parent meeting. However, the SM Weekly Group cohorts included in the present study included a single one-hour parent meeting during the course of treatment. Counselors and parents who completed qualitative interviews were permitted to discuss their experiences with either format of the SM Weekly Group program.

Post-assessment. Post-assessment occurred in the two weeks after the SM Intensive or SM Weekly Group ended. At post-assessment, parents completed the SMQ and SAS (see Table 1). Parents also completed the Client Satisfaction Questionnaire (CSQ-8) and provided updates about additional treatment or school generalization sessions that the child received since beginning the SM Intensive or Weekly program. Teachers of children in the SM Weekly Group program were asked to complete the SSQ. All questionnaires were available for parents and teachers to complete online using REDCap. Parents were asked to complete a qualitative interview about their perception of program acceptability, appropriateness, and feasibility. These interviews were conducted via phone.

Six Week Post-Assessment. The ADIS SM and Social Phobia modules and SSQ were conducted six weeks after treatment in order to allow ample time for generalization into the school setting. ADIS interviews were conducted via telephone. Teachers of children in the SM Intensive program were asked to complete the SSQ

via REDCap. See Table 1 for a list of measures collected at the six-week post-assessment.

Follow-up assessment. A follow-up assessment was conducted 3 months after treatment. Parents completed the follow-up questionnaires on REDCap. Specifically, parents were asked to provide an update about any treatments received since the post-assessment (including fade in-sessions, medications, etc.) and to complete the SMQ and SAS again. Teachers completed the SSQ on REDCap. See Table 1 for a complete list of measures collected at the follow-up assessment.

Measures. Parent and teacher reports of child speaking behavior (SMQ and SSQ, respectively), parent reports of child anxiety (SAS) and broadband child psychopathology and functioning (BASC-3), and client satisfaction (CSQ-8) were administered in Study 2. For detailed descriptions of these measures, please refer to Study 1. Also, as in Study 1, parents completed a demographics form and treatment history/treatment update forms. Treatment attendance was also recorded.

The ADIS parent diagnostic interview was conducted at pre- and post-treatment in Study 2. See Study 1 for a description of the interview. Unlike Study 1, the Social Phobia module was conducted in addition to the SM module. Clinical Global Impression-Severity (CGI-S) scores were assigned at pre-treatment and 6-week post-assessment. At 6-week post-assessment, Clinical Global Impression-Improvement (CGI-I) scores were also determined. CSRs, CGI-S scores, and CGI-I scores were determined by consensus. Interviewers were not independent evaluators; that is, interviewers were aware of treatment status and treatment program received.

See Table 1 for a timeline of measures and Appendices A-H for measures.

Qualitative Methodology. This study employed basic qualitative research involving thematic analysis of case study interviews.

Participants. Participants for the qualitative interviews were key stakeholders in the SM treatment programs, including the SM Program Directors, parents of children enrolled in the SM Intensive and Weekly Group programs, the practice owner, and counselors.

Interview Questions. Open-ended interview questions were created for each of the stakeholder groups in consultation with experts in treatment research and clinical practice (see Appendix I). Interviews were designed to take no longer than 1 hour to complete. All interviews were semi-structured in nature to promote inquiry into all target areas while permitting flexibility for open discussions and follow up queries as applicable/needed.

Interviews with parents included prompts to specifically assess the following topics: acceptability, appropriateness, and feasibility of each treatment format (i.e., intensive and weekly). Parents were also be asked to provide information related to costs of attending the program (e.g., program fees, missed work, childcare, camp week housing for out of town attendees). Interviews with counselors included prompts to assess the following topics: acceptability, appropriateness, and feasibility. Interviews with SM Program Directors included prompts to assess the following topics: acceptability, appropriateness, and feasibility. SM Program Directors were also asked about costs of running the programs (e.g., clinician time, supplies, renting space). The interview with the practice owner included prompts to evaluate views on implementing the programs within the business practice and factors associated with

supporting the continuation of the programs (i.e., appropriateness, feasibility, benefits).

Procedure. The author, a doctoral student in clinical psychology, conducted all individual qualitative interviews with key stakeholders. Parents were interviewed over the phone during the post-assessment period. All other stakeholders were interviewed either via phone or in person. Counselors were interviewed following the end of the treatment program. The Program Directors and the Practice Owner were interviewed at a time most convenient to them following the treatment program.

All interviews were digitally audio recorded for later transcription. Research assistants assisted in the transcription of all interviews. Transcripts were entered into analysis software for coding and analysis (i.e., NVivo). A team of coders (the author and two research assistants) coded each Parent and Counselor interview according to a code book that was collaboratively developed after the coding team reviewed and discussed the transcripts (see Appendix J). All interviews were coded by the author and one research assistant. Disagreements were discussed and codes were determined by consensus.

Data Analytic Plan. Given that the sample size is underpowered to detect statistically significant differences, no statistical analyses were conducted to compare the SM Intensive and SM Weekly Group programs within or between programs across assessment periods. Also given the small sample size and for the purposes of this study, data from the SM Intensive 2018 and SM Intensive 2019 cohorts were combined.

Effect sizes were calculated for each program using Hedges' g. Hedges' g is similar to Cohen's d, but corrects for biases due to small sample sizes. A Hedges' g of .2 indicates a small effect, .5 is a medium effect, and .8 is a large effect. Hedges' g is calculated as:

$$g = \left[\frac{\mathrm{M1} - \mathrm{M2}}{SD * pooled}\right] \times \left[\frac{\mathrm{N} - 3}{\mathrm{N} - 2.25} \times \sqrt{\frac{\mathrm{N} - 2}{\mathrm{N}}}\right]$$

Reliable change indices (RCI; Jacobson & Truax, 1991) were used to determine if there were clinically significant changes on outcome variables for each participant. Prior pilot studies with small samples have similarly used RCI analyses (e.g., Chronis-Tuscano et al., 2014; Chronis-Tuscano, Wang, Woods, Strickland, & Stein, 2017; Meinzer, Hartley, Hoogesteyn, & Pettit, 2018). RCI is calculated as:

$$\mathrm{RCI} = \frac{\mathrm{x2} - \mathrm{x1}}{\mathrm{SE}}$$

$$\mathrm{SE} = \mathrm{SD} \times \sqrt{1 - \mathrm{rxx}}$$

Where x1 represents pre-treatment scores, x2 represents post-treatment or follow-up scores, SE is the standard error of the measure, SD is the standard deviation of the normal population, and rxx is the reliability of the measure. Participants will be classified as showing reliable improvement, indeterminate change, or reliable deterioration.

All qualitative interviews were transcribed prior to content analysis. Transcripts were uploaded to QSR International's NVivo 12 qualitative data analysis software. NVivo was used to organize and systematically analyze qualitative data through the identification and coding of key words, concepts, and prominent phrases related to identified themes. Based on the *a priori* aims of the study and on the

content of the interviews analyzed using an inductive approach, a list of themes and subthemes was generated for Parent and Counselor interviews.

Design Considerations. In designing the proposed study, there were several design considerations:

Although randomized controlled trials (RCT) are considered the gold standard methodology for assessing the efficacy or effectiveness of an intervention (Des Jarlais, Lyles, & Crepaz, 2004), the current study was conducted as an open trial. Per consultation with the SM Program Directors and Practice Owner, the research design could not include a waitlist control group or randomize participants into SM Intensive or SM Weekly Group with self-pay clients; thus, an RCT was not possible in the community practice setting. Furthermore, because this is the first study to evaluate the effectiveness of SM Intensive in an outpatient community practice setting and only the second study to consider the effectiveness of small group weekly treatment for SM, establishing effectiveness and assessing feasibility and acceptability are acceptable first steps prior to conducting larger evaluations under more stringent and tightly controlled conditions (Weisz, Jensen, & McLeod, 2005).

The outpatient community practice setting necessitates that the research design limit adding eligibility requirements. Thus, aside from an additional parent language criterion, the study's inclusion and exclusion requirements reflected those used by the clinicians for determining program eligibility.

Considerable attention was given to balancing participant research burden with scientific rigor. To limit participant burden, broadband measures of child psychopathology and functioning (e.g., BASC-3) and broad measures child anxiety

disorders (e.g., Spence Anxiety Scale) were selected to ease assessment time. The parent diagnostic interview (i.e., ADIS) was limited to the SM and social phobia modules because these diagnoses were primary outcomes. The timing of the post-treatment diagnostic interview 6-weeks after treatment was selected in order to provide children an opportunity to generalize speech to school. Furthermore, diagnostic criteria for SM require that the disturbance in speech occur outside of the first month of school. The 6-week post-assessment time frame allows time for children to be in the school setting for over a month. To further reduce participant burden, questionnaires were made available electronically and formatted for easy completion on mobile devices. Interviews (diagnostic and qualitative) were conducted over the phone. Thus, no in-person research visits were required.

This study aims to evaluate generalization into the school setting. Although parent-report questionnaires include items related to school functioning (i.e., SMQ), including teacher ratings will enhance our understanding of children's speaking behaviors within academic settings, one context in which children with SM are greatly impaired. The inclusion of teacher ratings is also an improvement over some previous SM intervention studies (e.g., Sharkey et al., 2008) that did not include teacher ratings, despite the fact that children with SM generally do not speak at school.

The study aims to evaluate potential barriers and facilitators to implementing the SM Intensive and SM Weekly Group therapies in an outpatient community practice setting. Indeed, the present study is the first study to evaluate early implementation outcomes for group treatments for SM. Understanding program

acceptability, appropriateness, and feasibility from multiple perspectives will best inform our preliminary understanding of program implementation. Thus, parents of children enrolled in the programs, program counselors, program supervisors/developers, and agency-level persons (i.e., practice owner) were interviewed individually.

Lastly, because the current study's sample size is unlikely to yield sufficient statistical power to detect quantitative differences with or between the two treatment programs, no group analyses were conducted. However, effect sizes were calculated for each program and findings from qualitative interviews may highlight important differences between the programs, particularly with regard to feasibility and acceptability.

Chapter 3: Results

SM Intensive Camp

Fourteen children aged 4-13 enrolled in the SM Intensive Camps in 2018 and 2019. Descriptive data are presented in Table 2; data regarding treatment history are presented in Table 3. Fourteen parents completed pre-treatment and post-treatment assessment questionnaires, and 12 parents completed 3-month follow-up questionnaires. Thirteen parents completed the ADIS interview at pre-treatment, with 13 completing the SM module (SM Intensive 2018 and SM Intensive 2019) and six also completing the social anxiety modules (SM Intensive 2019 only). Four parents completed both modules at follow-up (SM Intensive 2019 only). Regarding attendance, 13 participants attended all 5 full days of the Intensive Camp and one participant completed 3 full days of the Intensive Camp due to known scheduling conflicts prior to SM Intensive enrollment. Eleven participants had one or more parents attend the single parent group meeting held during the program week.

Diagnostic status. See Table 4.

Selective mutism. Thirteen parents completed the selective mutism module of the ADIS at pre-treatment and four completed it at follow-up. Even though there was a medium effect (Hedges' $g = 0.72$) on CSRs from pre-treatment ($M = 5.38$, $SD = 0.96$) to follow-up ($M = 4.5$, $SD = 1.73$), the average CSR remained in the clinical range (>4). All children met criteria for SM on the ADIS at pre-treatment, and three of the four children with completed ADIS interviews at follow-up continued to meet diagnostic criteria.

Social anxiety. Six parents completed the social anxiety module of the ADIS at pre-treatment and four completed the module at follow-up. Even though there was a large effect (Hedges' g = 0.82) on CSRs from pre-treatment (M = 5.67, SD = 1.03) to follow-up (M = 4.75, SD = 0.96), mean CSRs remained in the clinical range. All children at pre-treatment and follow-up met diagnostic criteria on the ADIS for social anxiety.

Selective mutism symptoms and impairment. See Tables 5-7.

School speech subscale. From pre-treatment (M = 0.69, SD = 0.57) to post-treatment (M = 1.64, SD = 1.07) there was a large effect (g = -1.08) on speech at school. There was medium effect (g = -0.60) at 3-month follow-up (M = 1.18, SD = 0.99). Effects represent improvement in speech following treatment.

Regarding impairment, there was a large effect (g = -0.81) on SMQ School Impairment scores from pre-treatment (M = 1.21, SD = 0.98) to post-treatment (M = 1.93, SD = 0.73) such that parents reported an increase in impairment at post-treatment. There was a negligible effect at 3-month follow-up (g = -0.04, M = 1.25, SD = 0.87).

Home/Family speech subscale. From pre-treatment (M = 1.76, SD = 0.62) to post-treatment (M = 2.15, SD = 0.51) there was a medium effect on speech at home (g = -0.68). There was a large effect (g = -0.91) at 3-month follow-up (M = 2.29, SD = 0.52). Effects reflect improvement in speech following treatment.

With respect to SMQ Home/Family Impairment scores, there was a small effect (g = -0.20) on impairment from pre-treatment (M = 1.43, SD = 1.02) to post-treatment (M = 1.64, SD = 1.01), indicating greater impairment after treatment. There

was also a small effect on impairment at 3-month follow-up (g = 0.28, *M* = 1.17, *SD* = 0.72), reflecting an improvement in impairment at home.

Social speech subscale. From pre-treatment (*M* = 0.50, *SD* = 0.79) to post-treatment (*M* = 1.51, *SD* = 1.14), there was a large effect (g = -1.0) on speech in social settings. There was a medium effect (g = -0.56) at 3-month follow-up (*M* = 0.95, *SD* = 0.78). Effects reflect improvement in speech following treatment.

From pre-treatment (*M* = 1.43, *SD* = 1.09) to post-treatment (*M* = 2.50, *SD* = 0.65), there was a large effect on impairment (g = -1.16). This effect reflects an increase in impairment in social settings. Similarly, there was an increase in impairment from pre-treatment to 3-month follow-up (*M* = 2.0, *SD* = 0.6). There was a medium effect at 3-month follow-up (g = -0.61).

Total speech subscale. From pre-treatment (*M* = 1.01, *SD* = 0.44) to post-treatment (*M* = 1.79, *SD* = 0.80), there was a large effect on total speech (g = -1.17). There was also a large effect (g = -0.90) at 3-month follow-up (*M* = 1.50, *SD* = 0.62).

Regarding SMQ Overall Impairment, parents indicated an increase in impairment from pre-treatment (*M* = 1.43, *SD* = 1.02) to post-treatment (*M* = 2.07, *SD* = 0.48) and 3-month follow-up (*M* = 1.92, *SD* = 0.79). Hedges' g indicates medium effects on impairment at post-treatment (g = -0.78) and 3-month follow-up (g = -0.52), both in the opposite direction (i.e., more impairment).

Reliable change. On the SMQ School subscale at post-treatment (n = 14), 7 participants demonstrated reliable improvement, 4 showed indeterminate change, and 3 showed reliable deterioration. At 3-month follow-up (n = 12), 5 participants

demonstrated reliable improvement, 5 demonstrated indeterminate change, and 2 showed reliable deterioration.

On the SMQ Home/Family subscale at post-treatment (n = 14), 5 participants demonstrated reliable improvement and 9 showed indeterminate change. At 3-month follow-up (n = 12), 5 demonstrated reliable improvement, 6 demonstrated indeterminate change, and 1 showed reliable deterioration. Importantly, 3 participants' pre-treatment scores were high enough that no reliable improvement was statistically achievable.

On the SMQ Social subscale at post-treatment (n =14), 7 participants demonstrated reliable improvement and 7 showed indeterminate change. At 3-month follow-up (n = 12), 7 participants demonstrated reliable improvement and 5 demonstrated indeterminate change. One participant's pre-treatment score met the score ceiling (indicating maximum speech), resulting in no possible improvement.

On the SMQ Total scale at post-treatment (n = 14), 8 participants demonstrated reliable improvement, 5 showed indeterminate change, and 1 demonstrated reliable deterioration. At 3-month follow-up (n = 12), 9 participants demonstrated reliable improvement, 2 demonstrated indeterminate change, and 1 showed reliable deterioration.

Anxiety symptoms. See Tables 5-7.

Parents reported a decrease in Spence Total T-scores from pre-treatment (M = 58.2, SD = 12.9) to post-treatment (M = 53.8, SD = 11.4) and 3-month follow-up (M = 52.3, SD = 12.9). Hedges' g indicates small effects at post-treatment (g = 0.33) and 3-month follow-up (g = 0.47), reflecting less anxiety following treatment.

Parents also reported a decrease in Spence Social T-scores from pre-treatment (*M* = 65.5, *SD* = 13.2) to post-treatment (*M* = 61.1, *SD* = 12.9) and 3-month follow-up (*M* = 59.2, *SD* = 13.0). Hedges' g indicates small effects at post-treatment (g = 0.34) and 3-month follow-up (g = 0.43), reflecting less social anxiety, although scores at post-treatment are in the elevated range (T ≥ 60).

Reliable change. At post-treatment (n = 14), 2 participants demonstrated reliable improvement and 12 demonstrated indeterminate change on the Spence Total scale. At 3-month follow-up (n = 12), 2 participants demonstrated reliable improvement and 10 demonstrated indeterminate change on the Spence Total scale.

At follow-up (n = 14), 4 participants demonstrated reliable improvement and 10 demonstrated indeterminate change on the Spence Social scale. At 3-month follow-up (n = 12), 2 participants demonstrated reliable improvement, 9 demonstrated indeterminate change, and 1 demonstrated reliable deterioration on the Spence Social scale.

Satisfaction. Parents reported high levels of satisfaction with the SM Intensive Camp program. Scores ranged from 21-32 out of a possible 32, with higher scores reflecting greater satisfaction (*M* = 27.9, *SD* = 4.02).

School speech and impairment. See Tables 8 and 9.

Hedges' g indicates a negligible effect (g = -0.08) of treatment from pre-treatment (*M* = 0.79, *SD* = 0.53) to post-treatment (*M* = 0.86, *SD* = 1.08). There was a small effect (g = 0.21) on speech at 3-month follow-up (*M* = 0.67, *SD* = 0.53). At follow-up, this effect reflects a worsening of speech.

Regarding SSQ Impairment scores, Hedges' g indicates a negligible effect (g = 0.15) of treatment from pre-treatment (*M* = 1.88, *SD* = 0.99) to post-treatment (*M* = 1.71, *SD* = 1.11), and a small effect (g = 0.40) on impairment from pre-treatment to 3-month follow-up (*M* = 1.5, *SD* = 0.58). At follow-up, this effect reflects an improvement in impairment.

Reliable change. At post-treatment (n = 4), 1 participant demonstrated reliable improvement, 2 showed indeterminate change, and 1 showed reliable deterioration. At 3-month follow-up (n = 2), 1 participant showed indeterminate change and one showed reliable deterioration.

SM Weekly Group

Two cohorts of the SM Weekly Group were evaluated as part of the current study. Children ranged in age from 4-9 years old. Eight participants enrolled to participate in research on the SM Weekly Group (n = 5 from Cohort 1 and n = 3 in Cohort 2). Two of the eight SM Weekly group participants also participated in the SM Intensive research study, and two of the eight SM Weekly Group participants enrolled in the SM Intensive but did not enroll in the SM Intensive research.

Data across cohorts are pooled for the purposes of this study. Descriptive data are presented in Table 2; data regarding treatment history are presented in Table 3. Seven parents completed pre-treatment and post-treatment questionnaires, and 5 parents also completed 3-month follow-up questionnaires. Five parents completed the SM and social anxiety modules of the ADIS at pre-treatment, and three parents completed both modules at follow-up. Regarding attendance, seven participants attended all 4 weeks of the program and one participant attended 3 out of 4 weeks due

to illness. Six participants had one or more parents attend the parent group meeting. Notably, the COVID-19 pandemic overlapped with the 3-month follow-up for Cohort 1 participants as well as with the 6-week follow-up ADIS interviews and 3-month follow-up for Cohort 2 participants.

Diagnostic status. See Table 4.

Selective mutism. Five parents completed the selective mutism module of the ADIS at pre-treatment and three completed it at follow-up. Hedges' g indicates a small effect (g = -0.2) and worsening of severity from pre-treatment (*M* = 5.2, *SD* = 2.39) to follow-up (*M* = 5.67, *SD* = 0.58). Average CSRs remained in the clinical range following treatment. Four of five children met diagnostic criteria for SM at pre-treatment and three of three children met criteria at follow-up.

Social anxiety. Five parents completed the social anxiety module of the ADIS at pre-treatment and three completed the module at follow-up. The effect size on social anxiety was negligible (*g* = .14) from pre-treatment (*M* = 5.2, *SD* = 1.3) to follow-up (*M* = 5.0, *SD* = 1.0). Average CSRs remained in the clinical range following treatment. Four of five children met diagnostic criteria for social anxiety at pre-treatment and three of three children met criteria at follow-up.

Selective mutism symptoms and impairment. See Tables 5-7.

School speech subscale. Parents reported an increase in speech from pre-treatment (*M* = 0.93, *SD* = 0.73) to post-treatment (*M* = 1.21, *SD* = 0.90) and 3-month follow-up (*M* = 1.37, *SD* = 0.90). Hedges' g indicates a small effect at post-treatment (g = -0.31) and medium effect at 3-month follow-up (g = -0.50), reflecting more speech.

With respect to impairment, parents indicated an increase in impairment from pre-treatment (*M* = 1.5, *SD* = 0.93) to post-treatment (*M* = 1.71, *SD* = 1.11) and 3-month follow-up (*M* = 1.8, *SD* = 1.1). Hedges' g indicates a negligible to small effect at post-treatment (g = -0.19) and a small effect at 3-month follow-up (g = -0.28), both in the opposite direction (i.e., more impairment).

Home/Family speech subscale. From pre-treatment (*M* = 2.1, *SD* = 0.65) to post-treatment (*M* = 2.24, *SD* = 0.52), there was a small effect at of treatment (g = -0.22), reflecting an increase in speech. At 3-month follow-up (*M* = 2.0, *SD* = 0.67), there was a negligible effect (g = 0.14) of treatment.

Parents reported a decrease in SMQ Home Impairment scores from pre-treatment (*M* = 1.75, *SD* = 0.71) to post-treatment (*M* = 0.86, *SD* = 1.07) and 3-month follow-up (*M* = 0.8, *SD* = 0.84). Hedges' g indicates large effects at post-treatment (g = 0.94) and 3-month follow-up (g = 1.16), reflecting decreased impairment.

Social speech subscale. Hedges' g indicates a negligible effect (g = -0.14) of treatment from pre-treatment (*M* = 0.73, *SD* = 0.93) to post-treatment (*M* = 0.86, *SD* = 0.81) and small effect (g = -0.36) from pre-treatment to 3-month follow-up (*M* = 1.12, *SD* = 1.12), indicating more speech.

With respect to impairment, parents reported a reduction in social impairment from pre-treatment (*M* = 2.38, *SD* = 0.52) to post-treatment (*M* = 2.14, *SD* = 1.07) and 3-month follow-up (*M* = 1.8, *SD* = 1.1). Hedges' g indicates a small effect at post-treatment (g = 0.28) and medium effect at 3-month follow-up (g = 0.69), both reflecting less impairment following treatment.

Total speech subscale. Parents reported an increase in total speech from pre-treatment (*M* = 1.29, *SD* = 0.67) or post-treatment (*M* = 1.47, *SD* = 0.65) and 3-month follow-up (*M* = 1.52, *SD* = 0.86). Hedges' g indicates small effects at post-treatment (g = -0.26) and 3-month follow-up (g = -0.29), reflecting increased speech.

Hedges' g indicates small effect (g = 0.27) from pre-treatment (*M* = 2.13, *SD* = 0.99) to post-treatment (*M* = 1.86, *SD* = .90) and a small effect (g = 0.37) from pre-treatment to 3-month follow-up (*M* = 1.8, *SD* = 0.45).

Reliable change. On the SMQ School subscale at post-treatment (n = 7), 3 participants demonstrated reliable improvement, 3 showed indeterminate change, and 1 showed reliable deterioration. At 3-month follow-up (n = 5), 3 participants demonstrated reliable improvement and 2 demonstrated indeterminate change.

On the SMQ Home/Family subscale at post-treatment (n = 7), all participants demonstrated indeterminate change at post-treatment (n = 7) and at 3-month follow-up (n = 5). Importantly, four participants' pre-treatment scores were high enough such that no reliable improvement could be demonstrated.

On the SMQ Social subscale at post-treatment (n = 7), 2 participants demonstrated reliable improvement, 3 demonstrated indeterminate change, and 2 showed reliable deterioration. At 3-month follow-up (n = 5), 1 participant demonstrated reliable improvement and 4 exhibited indeterminate change.

On the SMQ Total scale at post-treatment (n = 7), 2 participants demonstrated reliable improvement and 5 showed indeterminate change. At 3-month follow-up (n = 5), 1 participant demonstrated reliable improvement and 4 showed indeterminate change.

Anxiety symptoms. See Tables 5-7.

Social and Total Anxiety subscales. On the Spence Social Anxiety scale, Hedges' g indicates a negligible effect (g = 0.15) of treatment from pre-treatment (*M* = 65.9, *SD* = 15.5) to post-treatment (*M* = 63.4, *SD* = 15.3) and a small effect (g = 0.32) at 3-month follow-up (*M* = 60.4, *SD* = 17.2), reflecting a slight decrease in anxiety although scores at post-treatment and follow-up remain in the elevated range (T ≥ 60).

With respect to the Spence Total Anxiety scale, Hedges' g indicates a negligible effect (g = 0.09) from pre-treatment (*M* = 58.9, *SD* = 14.0) to post-treatment (*M* = 57.7, *SD* = 12.3) and a small effect (g = 0.37) at 3-month follow-up (*M* = 53.8, *SD* = 10.9), indicating a small improvement in total anxiety.

Reliable change. At post-treatment (n = 7), all seven participants showed indeterminate change on the Spence Total scale. At 3-month follow-up (n = 5), 1 participant demonstrated reliable improvement and 4 demonstrated indeterminate change on the Spence Total scale.

At post-treatment (n = 7), 6 participants demonstrated indeterminate change and 1 showed reliable deterioration on the Spence Social scale. At 3-month follow-up (n = 5), 4 participants demonstrated indeterminate change and 1 demonstrated reliable deterioration on the Spence Social scale.

School speech and impairment. See Tables 8 and 9.

There was an increase in teacher-rated speaking behavior from pre-treatment (M = 1.04, SD = 0.48) to post-treatment (M = 1.29, SD = 0.77). Hedges' g indicates a small effect of treatment (g = -0.34), reflecting an increase in speech.

There was no change in SSQ Impairment scores from pre-treatment (M = 1.75, SD = 0.5) to post-treatment (M = 1.75, SD = 0.5). Hedges' g indicates no effect on impairment at post-treatment (g = 0.0).

Reliable change. At post-treatment (n = 4), all participants showed indeterminate change.

Satisfaction. Parents reported high levels of satisfaction with the SM Weekly Group program. Scores ranged from 24-31 (*M* = 28.0, *SD* = 3.22).

SM Intensive Camp Parent Qualitative Interviews

All parents who enrolled in the SM Intensive research study for the 2019 SM Intensive were invited to participate in the qualitative interview. Five of seven parents completed qualitative interviews about their experiences with the SM Intensive. Two parents did not respond to multiple requests for the interview.

Theme 1: Acceptability.

Theme 1.1. Treatment format and delivery. Parents were satisfied with the group format of the SM Intensive. Indeed, parents tended to enroll their child in the SM Intensive because the group format facilitated treatment goals (e.g., to practice speaking with peers, to learn that others struggle with SM too). Further, parents generally viewed the use of 1-on-1 "Big Buddies" favorably and found receiving daily feedback from counselors helpful. Written and oral feedback was provided to parents at the end of each day, very often with the child present, and parents reported that they would have preferred speaking to counselors alone.

Theme 1.2. Treatment content and treatment credibility. Parents often reported satisfaction with treatment content. That is, parents viewed the program activities

favorably. They reported that the activities seemed developmentally appropriate and engaging and provided opportunities for exposures to peers and adults. Parents also liked that activities included opportunities to practice speaking in community settings like Starbucks (for older children) and in school-like scenarios like show-and-tell during circle time (for younger children).

Theme 1.3. Individualization of treatment in a group format. Parents liked that the 1-on-1 counselors were able to work directly with their child on individual treatment goals. Further, parents liked when counselors consulted with them about treatment goals and goals for subsequent days of the program (although few parents reported counselors doing this). In addition to 1-on-1 child to counselor pairings allowing for individual attention, parents noted the SM Intensive program's flexibility in addressing both SM and non-SM related problems. For example, support was provided for other anxiety difficulties (i.e., eating/drinking in front of others, separation from caregivers) as needed.

Theme 1.4. Parent meeting. Parents who attended the parent meeting spoke favorably of it. They enjoyed feeling supported by other parents who experienced similar struggles and learning from other parents as well as the Program Director. Parents reported learning new ways to help their children by adopting an "exposure lifestyle" and ways to help transition treatment gains to school. Parents with less experience in helping their child with SM found general information about SM helpful while parents who had more experience wished for more in-depth information.

Theme 1.5. Areas for improvement. Although parents generally reported high levels of satisfaction with the SM Intensive, several areas for improvement were identified. Parents reported that communications could be improved. Several parents stated that they wanted more information about the SM Intensive logistics and rationale as well as enrollment procedures prior to signing their child up for the program. Parents also reported that counselor check-ins and feedback often occurred with the child present, though parents would prefer speaking with counselors without the child. Lastly, some parents stated that they wanted increased communication with the program directors during the SM Intensive, particularly regarding individualization of the treatment program (e.g., providing rationale *for how individualization of treatment fits child's specific needs*).

Some parents stated that they wanted more parent inclusion in the program. Specifically, parents reported wanting additional general education about SM, information about transitioning and supporting children in school settings, and practical skills to use to promote speech and reduce anxiety.

Several parents reported concerns about lack of organization during drop-off on the first morning of the program and stated that increased structure for drop-off and pre-program communication about logistics would be helpful.

Theme 2: Appropriateness.

Theme 2.1. Reasons for enrolling child in program and treatment goals. Parents reported several reasons for enrolling their children in the SM Intensive. In many instances, parents viewed the SM Intensive as a complement to and opportunity to expand on children's prior work in individual therapy. Most parents highlighted the

opportunity for their child to be exposed to new children and practice speaking and engaging with new peers as the primary reasons for enrolling in treatment. Recommendations from treatment providers as well as familiarity and past satisfaction with Program Directors and/or the hosting practice were also reasons for enrolling.

Theme 2.2. Familiarity with clinician(s) and practice. The notion of an existing relationship between the child/family and one of the Program Directors seemed to play a role in parents' views of the SM Intensive as appropriate for their child. This seemed to be explained, in part, by parents' trust in their clinician's recommendations and belief that the Program Directors and practice provide effective, high quality services. Upon learning that the 2019 SM Intensive camp would feature programming for older children, one parent stated, *"Because of our familiarity with the practice and good experience with their camp [a few years prior], we decided to nix the New York [SM camp program] idea and go ahead and give their camp, with this new part where they can focus on the older kids, a chance."*

Theme 2.3. Role of parents. Although parents play a limited role in the implementation of the SM Intensive (i.e., may help with counselor fade-in on first day of program), parents highlighted the role that they play in their child's overall treatment for SM and areas of interaction between the SM Intensive and parents. Parents tended to view the SM Intensive as an opportunity for children to engage in frequent exposure exercises and acknowledged their own role in continuing to engage children in exposure activities outside of the SM Intensive. Parents generally spoke favorably about feedback that they received from counselors about child progress at

the SM Intensive and reported wanting specific daily feedback in order to praise/reward the child for their successes and to build on their successes in future social interactions.

Parents of older children also reported difficulty engaging their children in exposure activities because their children resisted doing exposure practices with them. These parents hoped that their children would be amenable to practicing exposures and coping skills in the SM Intensive setting.

Theme 3: Feasibility, accessibility, and effectiveness.

Theme 3.1. Barriers and deterrents to treatment. Many parents reported that commute time and program hours were difficulties during the treatment week. However, parents also stated that the SM Intensive was a specialty program of relatively short duration (i.e., one week) and of great potential benefit to their children, and these factors helped parents justify the long commutes and taking time off work or shifting work schedules to accommodate program start and end times. Some parents noted that participating in the 9 AM-2 PM SM Intensive program would have been substantially more difficult or impossible for longer than a one-week period given work considerations.

Theme 3.2. Facilitators to treatment. Parents reported that job flexibility was a major contributor to being able to enroll children in the SM Intensive. Job flexibility allowed parents to shift work hours or take off time to allow for drop off and pick up. Job flexibility also played a major role in parents' ability to attend the parent group meeting, which was held one morning during the treatment week (one morning for the younger children's group and one morning for the older children's group).

Theme 3.3. Financial considerations. Cost for the SM Intensive Camp ranged from $1,800-$2,500, depending on age group and time of registration. Parents generally reported that although the cost of the program was "high" and likely "cost prohibitive for many people," it was also "fair" and in line with the cost of similar programs in Maryland and elsewhere in the country. Relatedly, parents appeared to view the cost of the SM Intensive as "high" when the program was compared to summer day camps versus when parents compared the cost to a comparable dose of individual therapy. Furthermore, some parents noted that the SM Intensive hosted by Alvord, Baker & Associates was ultimately cheaper than out-of-state alternatives because no additional travel, hotel, or individual clinical sessions to establish speech were required.

Theme 3.4. Effectiveness. Parents varied in whether they reported noticing change in their child's speaking or social behavior during or immediately following the SM Intensive program week. Some parents reported that, per counselor reports, their children exhibited speaking behaviors at the SM Intensive that they had never seen. For example, one mother of a 9-year-old said *"Just so many firsts that kids have done way back, I mean it was his first time ever doing show and tell, reading in front of a group, raising his hand, answering questions. And just for him to experience for the very first time, 'what do you want to bring in for show and tell?' 'Oh, I want to bring so and so and talk to the group about it.' I mean that's like pretty thrilling stuff for us."*

Other parents reported noticing changes outside of the SM Intensive. The mother of a 4-year-old stated, "*I mean I think since camp it's only been a week- not*

even a week, but I think it's already been noticeable. Today someone came over. You know, today was my double booking for someone to give us an estimate and he asked how old she was and she answered in a whisper and that would not have happened. I think also her independence. She came home just wanting to try new things. She was like, "let's take the training wheels off my bike." She is just so empowered and independent and feels just good about herself and so confident and I think that's all from the camp."

However, two parents reported that they did not notice changes in their child's speaking or social behaviors or that they had not yet had an opportunity to see changes.

SM Weekly Group Parent Qualitative Interviews

All parents who enrolled in the SM Weekly Group research study were invited to complete a qualitative interview following treatment. Four of eight parents completed interviews about their experiences with the SM Weekly Group. Four parents did not respond to invitations to participate in the interview.

Theme 1: Acceptability.

Theme 1.1. Treatment format and delivery. Parents viewed the group format favorably because it more closely resembled areas of impairment in daily life. As one mother stated, *"I think it's just more—I guess more what she's experiencing in a regular day. She's around more kids at school. She needs practice with a group of children rather than just a one-on-one thing."*

Parents also viewed 2-hour sessions favorably. One mother, who had experience with 1-hour group sessions, said *"I feel like with the hour we were just*

getting started and it was over, but with the two hours it really gave her a chance to do a little more, and let them go places and do different things to add new challenges each week. So, I thought the two hours was really helpful." The same sentiment was echoed by other parents, one of whom added that the 2-hour format made longer commutes (e.g., from Northern Virginia) more acceptable.

Although parents viewed the 2-hour weekend sessions favorably, some were skeptical about how effective treatment would be with a week between sessions *("I thought the week between was going to undo enough progress that they may never gain enough momentum to making significant progress."*) and only 4 weeks of sessions (*"I was just skeptical if within 4 weeks my kid would really be able to open up to a counselor she was seeing once a week."*).

Theme 1.2. Treatment content and treatment credibility. SM Weekly Group sessions were comprised of a mix of in-office and out-of-office sessions. Parents generally liked this mix. One mother said, *"I thought it was a good balance of stuff in the office and doing stuff outside…They went to a sweet shop that was across the street from the office, and then the last week we actually met at the library and had the whole session there."* Parents seemed to appreciate the incorporation of these out-of-office generalization activities as ways to challenge children and generalize speech while simultaneously acknowledging the limitations of trying to do so in a 4-week program. One parent stated, *"I think it was hard though with only having 4 weeks. It took the first one or two weeks to get comfortable with each other,"* while another mother said, *"The last session, (Program Director) asked if he wanted to go on the*

(library) scavenger hunt and he didn't, and I know him and he was not ready. I like that they picked up on the fact not to be pushy only knowing him for a few sessions."

Theme 1.3. Individualization of treatment in a group format. Several parents spoke about the program's ability to meet their child's individual needs and to be sensitive to differences in SM severity across participants in the SM Weekly Group. For example, one parent's child worked with the same "Big Buddy" across several cohorts of the SM Weekly Group and the SM Intensive. Pairing the child with the same "Big Buddy" at the Fall 2019 SM Weekly Group helped reduce the child's difficulties with separation anxiety so that treatment could focus on SM. Her mother stated, *"I think normally we focus a lot on separation first—to fade me out and build up the comfort with the new counselor. That would require probably the first several sessions, or at least a session. But since she was already comfortable with (counselor), she was pretty quick to let me go so that (counselor) could focus on working with the other kids and helping (child) get comfortable with the other kids."* Other parents remarked about small changes that were made to help their children (e.g., warming up in separate room instead of in room with other dyads, parent staying for session).

Theme 1.4. Parent meeting. The 1-hour parent meeting for the SM Weekly Group was held immediately after one of the weekly sessions and was Q&A format. Parents spoke favorably about the small-group nature of the meeting (only parents of children enrolled in the program) and getting to ask child-specific questions. Parents also liked hearing what questions other parents had, especially when parents had varying levels of experience and children in different places in their SM treatment

journey. Parents also enjoyed the opportunity to be around other parents who were going through similar SM challenges with their children.

Theme 1.5. Areas for improvement. Parents reported that feedback about child behavior and progress during each session was minimal. Parents stated that they wanted both written and oral (without child present) feedback from counselors at the end of each session. In particular, parents stated that they wanted information about what goals the child worked on, how well progress went, what goals would be for the next week, and what parents should work on supporting between sessions. Parents also reported wanting additional opportunities to learn skills to promote child speech. Lastly, several parents stated that increasing the number of SM Weekly Group weeks (e.g., an additional 2 weeks) may be helpful as it would allow for additional opportunities for out-of-office generalization activities as well as buffer against time parents have not yet faded out of interactions during the program.

Theme 2: Appropriateness.

Theme 2.1. Reasons for enrolling child in program and treatment goals. Parents reported that the group format was the main reason for enrolling their children in the SM Weekly Group. Parents believed that the group format would allow their children to practice speaking and engaging with peers and would build on prior (individual and group) therapy experiences. Additional reasons for enrolling in the SM Weekly Group included ease of accessibility over weekday individual therapy appointments and the opportunity to begin consistent engagement in treatment with a 4-week treatment commitment. Goals parents had for their children included

practicing speaking around and with other children and building awareness of SM and motivation to speak.

Theme 2.2. Familiarity with clinician(s) and practice. Several parents reported that the SM Weekly Program Director also served as their child's individual therapist and it was through this relationship that they learned about the SM Weekly Group as possibly appropriate for their child's treatment needs. Children who enrolled in the SM Weekly Group from outside of the Program Director's individual case load were referred specifically for group treatment by her colleague, an expert in SM, at Alvord, Baker & Associates.

Theme 2.3. Role of parents. Parents spoke about the impact that their views on therapy had on engagement and participation in treatment. For example, one parent said that her approach has been to *"throw everything at this right now and just do everything we can before she hits kindergarten."* However, another parent of a preschool-aged child said, *"We had done a couple of [individual] therapy sessions. We just weren't consistent with it. We thought we could do the therapy, get the tools, do it on our own, and we were seeing that it wasn't happening."* She used the SM Weekly Group as a way to build up consistent engagement in treatment and learn skills to help her child, stating *"I don't think I would have the momentum that I have now to really tackle this, and wouldn't really have the tools because I just learned so much going into the [SM Weekly Group] therapy. I mean, I know- I feel like I've been talking so much about "me, me, me" and me learning, but honestly without the parent knowing what to do, you know?"*

Unlike the SM Intensive, parents of children in the SM Weekly Group reported more engagement in the therapy process during the group sessions. Several parents stayed and worked with their child and the child's counselor for large portions of session time during multiple weeks; however, this seemed to vary with severity of SM presentation and/or co-occurring difficulties with separation. Also, in contrast to the SM Intensive, parents reported receiving minimal oral feedback and no written feedback from their child's counselor about their child's progress but that specific feedback and recommendations would be helpful.

Theme 3: Feasibility, accessibility, and effectiveness.

Theme 3.1. Barriers and deterrents to treatment. Several parents who enrolled their child in the SM Intensive knew about or previously enrolled their child in the SM Weekly Group (prior to the current study). Importantly, iterations of the SM Weekly Group that were held prior to the current study were held in the evenings on weekdays during the school year. These groups were scheduled for 1 hour per week for 8 consecutive weeks. These parents cited rush hour traffic as the biggest barrier to these groups such that some parents did not enroll their child in the group or were unwilling to re-enroll in the group because the child was pulled out of school early in order to attend on time. Rush hour traffic was a larger concern among families coming from Northern Virginia than for those who resided in Montgomery County, MD.

Theme 3.2. Facilitators to treatment. Consistent with weekday commute traffic being a major barrier to previous SM Weekly Groups, parents identified that SM Weekly Group sessions on weekends made their participation more feasible.

Parents noted that weekend sessions did not require them to leave work early, take their child out of school early, or hire babysitters to care for other children. Parents also noted that spouses were helpful in facilitating weekend treatment as one parent could stay with sibling(s).

Theme 3.3. Financial considerations. Cost for the SM Weekly Groups held in Fall 2019 and Winter 2020 was approximately $210 per session. Parents acknowledged that, although expensive, the cost of treatment seemed on par with the cost of services from other providers. Several parents noted that it seemed to be a relatively good price given that it equated to 2 hours of group therapy time (the desired treatment format) for the cost of 1 hour of individual therapy. Parents also noted that they were not charged if the child missed a week due to illness and that the parent meeting was offered at no additional cost.

When asked about financial considerations, one mother stated, *"We were kind of debating 'do we do this (SM Weekly Group) or do we do that (SM Intensive),' because with the cost we're not sure if we'll be able to do both or not. So that was sort of a debate that we had, but this was sooner so we wanted to try this… Therapy in general seems to be expensive, and when you get into special behavioral ones it seems more so. So, I didn't consider it out of line with what other therapists would charge, but I definitely – this is not a criticism of (director) at all, just working within the system and knowing we're relatively well-off people, it can be a financial strain. And I can imagine very well that there are a lot of kids who would need this help who can't get it because it's cost prohibitive. But that's the nature of the beast. That's not to be critical of (director)."*

Theme 3.4. Effectiveness. Parents varied widely in what behavioral changes they noticed in their children during and immediately following the SM Weekly Group. Some parents noticed no changes in their child's speaking or engagement with other children outside of treatment but some changes during the sessions (e.g., able to talk to counselor, tolerant of parent leaving and communicating nonverbally with counselor). Others noticed changes outside of session. For example, one parent remarked that *"At Chick-fil-A one night, blew our minds, she invited two kids that she didn't know to join her in playing in the play place."* Significant behavioral changes were also reported by a mother whose child participated in several cohorts of the SM Weekly Group, the SM Intensive, and individual therapy. After the Fall 2019 SM Weekly Group she reported that her child began asking to stay at her (half-day) school for an extra hour to attend the lunch bunch and participated in a school holiday shop event (where no parents were allowed). This mother stated that, *"I think her independence- especially after the camp, I think a lot of this stems back to the camp. It built her confidence a lot. And I think this built on it, having these four sessions,"* thus highlighting the need for intensive and consistent treatment.

Counselor Qualitative Interviews

Participants. Ten interviews were conducted across nine counselors. On average, counselors were 25.3 years old. Seven counselors were doctoral students in clinical psychology (University of Maryland, College Park = 6; Catholic University = 1). All doctoral students were in their 3rd or 4th year of training at the time of the interview. The remaining counselors were a post-baccalaureate research assistant and an advanced psychology undergraduate student. All counselors were non-Hispanic

females (n = 7 Caucasian, n = 1 Asian, n = 1 African-American). Seven counselors participated in both the SM Intensive and SM Weekly, one counselor participated in only the SM Intensive, and one counselor participated in only the SM Weekly Group.

Of the eight counselors who participated in the SM Intensive, four participated once and four participated twice. Of the counselors who participated in the SM Weekly Group, five served as counselors for one cohort, two served as counselors for three cohorts, and one counselor participated in seven cohorts.

Theme 1: Acceptability.

Theme 1.1. Training. Counselors consistently reported low burden of training. However, there was variability in how counselors were trained depending on the program and counselors' prior experience. Counselors participating in the SM Intensive tended to receive a half-day of in-person training in addition to reviewing online videos and documents; returning counselors were not required to attend the entire half-day training. Counselors participating in the SM Weekly group who had not previously participated in the SM Intensive met briefly with a director prior to the group to receive instruction on child-directed interaction and verbal-directed interaction skills.

Counselors liked having the opportunity to practice skills and receive specific feedback prior to the Intensive/Weekly group but found significant value in continued training during the treatment program. The SM Program Directors continued to model use of intervention strategies and provide counselors with live feedback throughout the SM Intensive and SM Weekly programs. Counselors tended to report that they wanted more explicit training on how to interact with parents/caregivers in various

treatment contexts (fade-ins, separation difficulties, providing feedback). Furthermore, many counselors indicated that they wanted explicit training on interacting with other counselors and children during treatment. For example, counselors wanted more information about how to communicate the child's level of progress so that the other counselors know the appropriate level of challenge during interactions.

> *"You have to balance the training needs and the feasibility [for counselors]. I think that the training was sufficient for preparing students. And I think there's follow up where you're not just getting trained once and they're saying, "okay, see you later." They're at the [program], right behind you, constantly monitoring, so you get that in-vivo coaching and that immediate troubleshooting or feedback from them. I think that's a good way to ensure that training continues beyond just that single day."*

Theme 1.2. Supervision. Counselors generally spoke favorably about supervision for the SM Intensive and SM Weekly programs. Counselors found the program directors approachable, accessible, and knowledgeable. They enjoyed receiving live feedback and support from the directors during the treatment programs. Counselors noted that program directors were responsive to questions or concerns, but that counselors sometimes needed to be proactive in asking for support. Across the SM Intensive and Weekly programs, supervision was largely provided during the active treatment session with additional brief group meetings at the beginning of each session. Counselors varied on whether or not they felt that additional dedicated group supervision meeting time would be helpful, noting that such meetings would increase

counselor burden and might decrease feasibility for participating but may also be beneficial for sharing information about children and treatment techniques.

Counselors reported high levels of spontaneous collaboration and learning from peers. Counselors stated that they often watched and asked questions of more experienced counselors, particularly when counselors came from the same training program. Peer consultation/supervision was more commonly reported during the SM Intensive, where counselors reported experiencing more frequent interactions with other counselors.

Theme 1.3. Treatment. When asked about satisfaction with their experience in the programs, counselors in both the SM Intensive and SM Weekly programs reported high levels of satisfaction. Consistent with high levels of satisfaction, the majority of counselors participated in the SM programs multiple times. Counselors noted that their enjoyment working with the children and seeing their progress, perceptions of participation as a valuable training opportunity, supportive and warm relationships with program directors/supervisors, and the ability to balance SM Intensive/Weekly program responsibility with competing school demands as reasons for high satisfaction and repeated interest in participating in the programs.

Theme 2: Appropriateness.

Theme 2.1. Treatment fit for SM. Counselors perceived the SM Intensive and SM Weekly group programs to be an appropriate treatment for children with SM. Counselors noted that the distinct pieces of the treatment approach, including the use of CDI and VDI skills, use of fade ins/outs, group formatting, and inclusion of generalization activities each appeared to be helpful in building speech.

Counselors in the SM Intensive reported that being paired with the same child throughout the week and having 5 hours per day with the child seemed to promote progress. Counselors in the SM Intensive were able to establish warm relationships and speech with their child, and then used the relationship to generalize speech to other children and adults. Counselors in the SM Weekly program found it more difficult to develop speaking relationships and obtain speech given the briefer sessions and once-per-week meeting. Counselors in the SM Weekly program also noted that children missing a week seemed to result in setbacks, requiring prolonged warm up time and the need to reestablish speech between the child and counselor.

Theme 2.2. Skill use. Counselors reported feeling confident in their ability to use treatment program skills. This was particularly true of counselors who participated in several SM treatment programs. New counselors reported feeling more confident using CDI skills than VDI skills but felt that their confidence in using VDI increased by observing other counselors and the program directors use of VDI skills. Counselors across both the SM Intensive and SM Weekly group programs noted lack of confidence in their ability to provide feedback to parents at the end of the session/day and lack of confidence in knowing how to interact with parents during treatment (i.e., navigating separation issues, when parents reinforced non-speaking behavior). Counselors who participated in the SM Intensive and SM Weekly programs also noted that it was more difficult to perceive and gauge child progress during the SM Weekly than SM Intensive program, and lack of perceived child progress lowered their confidence as effective clinicians in the SM Weekly condition.

Theme 2.3. Fit with goals as a student/trainee. Consistent with the status of most counselors as doctoral students in clinical psychology, the majority of counselors indicated that their personal goal for participating in the program included gaining clinical experience and clinical hours toward internship/licensure. In particular, students reported interest in gaining treatment experience with a population that was novel to them (i.e., children with SM), general interest in additional experience working with children, additional experience providing therapy in a group format, and interest in exploring careers in private practice and observing licensed professionals provide services. Non-doctoral student counselors expressed interest in exploring possible fields of interest and gaining experience to bolster graduate school applications.

Theme 3: Feasibility, accessibility, and effectiveness.

Theme 3.1. Barriers and deterrents to participation as counselor. Managing competing demands emerged as the most common barrier to participation. Highlighting the "volunteer" aspect of the position, counselors were generally doctoral students in clinical psychology programs with other clinical, research, academic, and teaching demands. SM Intensive counselors reported mixed opinions about navigating barriers during the program week. Some highlighted increased flexibility in their schedules given fewer academic and teaching demands in the summer while others noted that participation required rearranging several meetings and ongoing clinical activities.

Counselors who participated in the 1 hour/week day variation of the SM Weekly group noted that participating during the work week during the academic

year was manageable but counselors found the commute to be a deterrent, stating that "you travel all the way to the practice and essentially you turn right around." Counselors generally reported preferring the 2 hours/weekend variation given that the weekend hours do not require adjusting weekday schedules, but verbalized concerns related to navigating the possibility of burnout with less time on the weekend for personal and school tasks.

The commute also emerged as barrier for some counselors. Counselors who lived further from the program location(s) or those who lacked their own transportation reported that the commute was the biggest burden of participating in the program(s). The commute was more of a deterrent for the SM Weekly program in its 1 hour/weekday variation (vs. 2 hour/weekend version), given that the program start times coincided with DC Metropolitan area rush hour.

Theme 3.2. Facilitators to participation as counselor. Counselors indicated several factors that facilitated their participation in the SM Intensive and SM Weekly. Because the majority of counselors were doctoral students, most counselors indicated that support of advisors and the training program was a major facilitator. Counselors also cited scheduling flexibility over the summer (SM Intensive), evening sessions (SM Weekly, 1/hr weekday version), weekend sessions (SM Weekly, 2/hr weekend version), flexibility in completing training in-person or via Zoom if needed, and location of the program in the DC Metropolitan area (vs. similar programs with counselor opportunities in New York City) as facilitators in participation.

Theme 3.3. Financial considerations. Counselors expressed that financial compensation would be appreciated if available, but that their main motivations for

participating were training experience and gaining child clinical therapy hours for internship.

> *"I'm not really focused on the financial compensation so much as 'is this a valuable clinical experience where (A) I'm learning something, (B) I'm getting the supervision I'm looking for, and (C) it's something that I think is going to make me a stronger clinician overall and help me clarify what my future career goals are?'"*

Theme 3.4. Effectiveness. Counselors highlighted that each child came in with a different starting point and treatment goal (i.e., talking to peers vs. whisper to individual counselor), and that each child incrementally worked toward a goal. Counselors in the SM Intensive program generally noted that children made progress from Day 1 to Day 5 of the program, while counselors in the SM Weekly program remarked that progress seemed slow and more minimal. Counselors who participated in both the SM Intensive and SM Weekly programs credited the prolonged treatment day and quick succession of treatment sessions (i.e., daily vs. weekly) in the SM Intensive Program for greater treatment progress. With the 5-hour treatment days in the SM Intensive, counselors felt better able to generate more opportunities for successful exposures. At the SM Weekly, counselors often felt that a significant portion of the session was required for warm up, leaving less opportunity to interact with peers or other counselors. This was particularly true of counselors who provided services in the 1-hour weeknight SM Weekly, but was also noted by counselors with severely impaired children in the 2-hour weekend SM Weekly groups. Several counselors noted that although treatment gains were often made in both treatment

programs, many children ended the programs continuing to demonstrate difficulties with SM. Further, some counselors were skeptical about generalization given their observations that some parents did not demonstrate use of CDI and VDI skills and often reinforced non-speaking behavior.

> *"I would say for the camp that my camper transformed from the beginning to the end. Now, did she transform to the point of being in the normative range? Absolutely not, but she had exposures to hearing her own voice, to speaking audibly and even loud, to speaking to peers and giving a little poster presentation and answering questions from adults. So those are tremendous gains."*

Program Director Qualitative Interviews

Acceptability. Although generally satisfied with the SM Intensive and SM Weekly Groups, the Program Directors view their treatment programming as continuously evolving, building from prior iterations of the groups in order to increase treatment reach and effectiveness.

The SM Program Directors noted that children with SM need considerable practice speaking in order to undo the practice they have had remaining silent. Group treatment serves as a bridge between individual therapy and interactions in the community, as clinicians provide direct support in situations in which children are with peers or other adults. However, the SM Program Directors highlighted that the current psychotherapy treatment culture expects a 45-minute session once per week. Unfortunately, this model of care does not allow for the generalization into community or school settings that needs to occur for children with SM to be

successful in overcoming the disorder. The development of additional SM treatment programming (outside of individual therapy sessions) within the community practice setting allowed the clinicians to more effectively practice exposures to work toward generalization. The SM Program Directors noted that their goal of developing group treatments for SM was supported and encouraged by the community practice owner, who is a great advocate for group treatment and evidence-based practice.

Consistent with the SM Program Directors' view of the groups evolving over time, the SM Weekly Group has undergone several iterations. Prior to the current study's data collection with patients, the SM Weekly Group was held for one hour a week for eight weeks during the typical work week. This format fit well into clinician's regular schedule within the community practice. However, the SM Program Directors reported that weekly groups were logistically difficult in the community setting because after school hours were typically busy with individual therapy appointments. Furthermore, the SM Weekly Groups posed logistical challenges as clinicians aimed to form developmentally-appropriate cohorts; thus, clinicians had the task of securing a day/time that was feasible for the families of 3-5 similarly-aged children.

The SM Program Directors noted that patient recruitment logistics for the SM Intensive may have been easier than for the SM Weekly Group. This may be because the SM Intensive is a dedicated week of treatment and families may have been more motivated to engage in intensive services immediately prior to the school year. However, the SM Intensive required significant preparation time (i.e., securing a

location, recruiting and training a greater number of counselors, purchasing supplies, planning extensive activities, communicating with parents).

The SM Program Directors reported that they regularly received unsolicited feedback from parents during and immediately following the SM Intensive about increases in child speaking behavior. However, the directors did not report receiving similar feedback during or after the SM Weekly Groups. The directors also did not expect the SM Weekly Group to have the same impact or ability to create "break throughs" as the SM Intensive and thus were not surprised at the difference in parent feedback.

Despite developing programs that aim to provide children with SM with the repeated exposures needed to improve speaking behavior, the SM Program Directors acknowledge that the dose and frequency of treatment needed for children with SM poses financial difficulty for many treatment-seeking families. This barrier highlights the importance of clinicians understanding each child and family's treatment priorities and providing parents with psychoeducation about treatment needs for children with SM and appropriate expectations for behavior change based on amount and type of treatment.

Appropriateness. The SM Program Directors began their programming in order to provide evidence-based, multimodal treatment to an underserved clinical population. Given the difficulty of treating SM and lack of qualified providers, the SM Program Directors wanted to develop a program that could serve patients through individual or group treatment modalities, as well as at different intensities (full-day camp, half-day intensives, weekly group) and with opportunities to have services in

school. The SM Program Directors reported that the SM Intensive and SM Weekly Groups are not stand-alone interventions but are part of a larger course of comprehensive treatment which, ideally, includes individual therapy, parent training, group treatment, and school generalization sessions. They conceptualize group interventions as a higher-level exposure activity and acknowledge that not every child who presents to them with SM will be ready for group (SM Weekly or SM Intensive). Group treatment represents a component of treatment generalization and assumes that children have acquired speech with the clinician during individual therapy appointments.

> "*If they get into a group, the goal would be generalization. I try to maintain individual work or parent-based work separately so that they can have both of those components, because the group is not a stand-alone. It should not be functioning as a stand-alone."*

The SM Program Directors reported that the SM Weekly Group and SM Intensive aim to help generalize speech in the community by providing additional repetitions of practice speaking in peer and community settings. While they believe that the groups are appropriate in the generalization stage of treatment, they often have difficulty educating parents on the larger treatment needs of children with SM and the need for work outside of the group program. They noted that families who commit to multimodal treatment appear to make more progress than families who disappear at the end of group. Further, they remarked that they aim to transfer control of the intervention to parents and teachers so they can actively implement treatment on a regular basis and across contexts.

> "*You can't just send your kid to group [SM Weekly Group/SM Intensive] and assume we're going to generalize to everything. Making sure families understand that is hard."*

The SM Program Directors discussed the theoretical underpinnings supporting their treatment programs as appropriate for children with SM. The programs use PCIT as a foundation and remarked that the predictability of PCIT is one of the aspects that makes it easy for parents, teachers, and program counselors to use. The broad PCIT framework helps clinicians support speech in moment-by-moment interactions through consistent use of CDI and VDI skills. In addition to drawing from PCIT, the SM Intensive and SM Weekly Group draw from exposure-based therapy and standard CBT practices, including the use of exposure hierarchies focused on adjusting contextual changes and differential reinforcement. Prior to beginning the SM Intensive and SM Weekly Groups, the Program Directors had demonstrated clinical expertise in CBT, PCIT, SM, child anxiety treatment, and group treatments. Further, the Program Directors had experience training and supervising doctoral students.

Feasibility. The SM Program Directors discussed several aspects of treatment feasibility including sustainability of clientele, cost, staffing, and barriers for families.

With regard to sustainability of patients, they noted that having a reputation in the DC metropolitan area for expertise in SM helped build caseloads of children with SM, which then aids in recruitment of patients for the SM Intensive and SM Weekly Group programs. Referrals for the programs are also received from other clinicians in the area who are aware of the SM programs, as well as from pediatricians,

psychiatrists, and schools. Word-of-mouth from parents who have had children in the programs is also helpful. Furthermore, the SM Program Directors stated that there is a great need for services for children with SM and very few providers in the area with expertise in treating the disorder. Expanding the age range for services within the community practice due to clinical need for support for older children also generated additional patients for the programs.

The current model of the SM Intensive and SM Weekly Groups works by having a strong relationship with nearby universities. Specifically, University of Maryland and Catholic University graduate students in clinical psychology tend to fill counselor positions for the programs. The SM Program Directors stated that it would be exceptionally difficult to run the programs without the volunteer counselors working one-on-one with the children because of additional cost considerations associated with paying counselors. The Directors noted that the relationship between volunteer counselors and the program seems mutually beneficial, as the counselors are in the process of training and are willing to learn for their own benefit.

Although the SM Programs do not pay for counselors' time, there are numerous costs associated with running the groups. The SM Intensive costs include rent for space, materials/supplies, advertisements, and clinician time preparing for and during the SM Intensive week (recruiting and training counselors, providing clinical services, coordination). The SM Program Directors also highlighted that there are often "hidden fees" like credit card transaction fees that are often overlooked. The SM Weekly Group generally has fewer overhead costs (i.e., no rental space needed, less need for advertisement). The community practice in which the programs were

held employed the SM Program Directors as employees (vs. contractors). As such, the Directors were paid for time spent in program preparation when no billable clinical services were provided. Indeed, the Directors noted that their time is a significant portion of the cost of running the programs. The Directors also reported that the SM Intensive has not yet been profitable for the practice.

Despite the SM Intensive not being profitable from a business perspective, the cost for individual children to enroll in the program varied from $1,800-$2,500 (depending on time of enrollment and age group), not including intake appointments or individual therapy sessions to meet minimal program speaking requirements. Still, the SM Intensive was priced to fall in-line with the average cost of similar programs around the country. Further, compared to the SM Weekly Group (which cost approximately $120/hour) and individual therapy, the SM Intensive was more economically affordable per hour (approximately $72-$100/hour). However, families must front-load the cost of treatment for the SM Intensive whereas the SM Weekly Group or individual therapy allows families to space out payments.

The SM Program Directors acknowledged that cost is a significant barrier for many families. One director stated, **"***Many families, if I do an intake, ask about lower cost services that may be available. Unfortunately, there's just…there's no one [with expertise in SM] in the area that takes insurance. I don't know of anyone in the area."* The Directors noted that many families may receive out-of-network insurance benefits using a group treatment code, but they are not sure how much families are reimbursed. They also noted that one family used crowdfunding to pay for treatment. Another barrier for successful treatment in the SM Programs is parent motivation to

engage in multimodal treatment. The Directors noted that how caregivers prioritize time and resources likely influences how much treatment children receive. They also noted it can be exceptionally difficult to educate parents on how much treatment may be needed for children to successfully overcome SM.

Practice Owner Qualitative Interview

The Practice Owner provided some information about the SM Programs operating within her practice, although she noted that the SM Program Directors are largely in charge of program operations.

Regarding fit of the SM Intensive and SM Weekly Groups into the practice, the Owner stated that the practice as a whole is group oriented. The Owner feels strongly that there is a need for services that far surpasses the availability of clinicians, and group treatment is a way of providing services to more people. The Owner is also an advocate for group treatment for children because receiving treatment with peers helps children feel not alone in their struggles. The Owner also feels strongly about clinicians in her practice using evidence-based practices. When approached by the Program Directors about the SM Intensive and Weekly Groups, the Owner was comfortable with the practice beginning to treat children with SM in a niche manner and noted that the programs have the ability to give the practice additional notoriety. Moreover, she felt that the Program Directors were competent clinicians and was confident in their ability to develop the programs and treat children with SM through multimodal approaches.

Although the programs have operated for several years, the Owner is not sure how well known the SM Program has become yet or how the larger community has

responded to the SM Program being available. She feels there is room to do additional marketing, but acknowledges that marketing requires time, energy, and money. She noted that she uses her own platform and reputation in the community to inform others about the SM Program. She also stated that when clinicians go to conferences, conventions, or trainings (i.e., to present, network, etc.), they must pay to attend the event *and* lose income by not providing clinical services while out of the office.

The Owner also provided her thoughts on program feasibility from a business perspective. She noted that the SM Intensive resulted in the practice losing money, and stated the largest cost was the Program Directors' time. She also noted additional costs included staff time, advertising, rental space, and materials. Overhead costs in the first few years of the program were lower because the practice had the physical space to accommodate the SM Intensive for one week. It was also possible to use office space for the earlier years of the SM Intensive because other clinicians did not come in until later in the afternoon and the SM Intensive ended by 2pm. Further, earlier years of the SM Intensive did not enroll as many children. The Owner stated that to reduce cost to the practice in the future, they may consider paying a graduate student to help coordinate the programs, noting that a graduate student would be less expensive to pay than the Program Directors and it could be a good training opportunity.

With respect to feasibility for families, the Owner stated that the cost of the SM Intensive and Weekly Groups is often a considerable amount for parents to pay. She noted that families can try to seek reimbursement form insurance companies

using special modifiers, but many companies may still deny the claim. One way in which the practice reduces program cost is through the use of volunteer therapists to serve as one-on-one counselors. Without the volunteer therapists, the Owner does not think the programs could operate. Paying counselors would increase cost for families, and "*you know this is a well-to-do area. Even here, cost is a challenge."* The use of volunteer therapists not only reduces cost of treatment for families, but also provides training for young clinicians. The Owner considers herself a mentor and strives to create an atmosphere of mentoring within her practice.

Chapter 4: Discussion

The current study examined preliminary effectiveness of the SM Intensive and SM Weekly Group and builds on prior research on group interventions through the examination of early implementation outcomes for the group interventions within a community private practice setting. The current study employed quantitative methods to evaluate treatment effectiveness at post-treatment and 3-month follow-up as well as qualitative methods to examine treatment acceptability, appropriateness, and feasibility among key stakeholders. Importantly, the current study used an open-trial design and recruited a small sample from each group intervention program. Given the preliminary nature of the current investigation as well as in the development and evaluation of SM treatment programs in the field as a whole, the strength of the current study is in the opportunity to interpret preliminary effectiveness in light of implementation in order to generate hypothesis for future research as well as recommendations for program improvement.

Summary of Quantitative Results: SM Intensive

Effect sizes for parent-reported speaking behavior ranged from medium to large at both post-treatment and follow-up, indicating improvements in speech following treatment. Effect sizes for parent-reported social and total anxiety were small at both post-treatment and follow-up. Notably, although improved after treatment, total and social anxiety T-scores remained elevated. Average SM and social anxiety CSR scores as well as CGI-S scores on the ADIS interview decreased from pre-treatment to post-treatment, although the majority of children maintained CSRs in the clinical range, indicating their continued diagnoses of SM and social

anxiety following treatment. However, effect sizes for SM and social anxiety were medium and large, respectively. By contrast, the average CGI-I score indicated minimal improvement though no participant's CGI-I score indicated clinical deterioration.

Although parent-report measures of speaking behavior and anxiety indicate improvements, parents also reported an increase in speech-related impairment at school and in social situations at post-treatment. Given the timing of the assessments, with pre-assessment occurring in the summer and post-assessment occurring early in the new school year, it is possible that parents viewed their children as less impaired over the summer (relative to fall) due to fewer speaking demands when children are not in school. Additional research is needed to examine worsening impairment following the SM Intensive to determine if it is an artifact of assessment timing or reflective of deteriorating functioning.

Individual case outcomes, assessed using RCI analyses of parent-report questionnaires, demonstrate considerable variability in in reported improvements following the SM Intensive. Half of parents reported clinically significant improvement in speaking behavior at school and in social situations, and one third of parents reported clinically significant improvement in speaking at home following treatment. Overall, about 60% of parents indicated that total speech improved at post-treatment. At 3-month follow-up, RCI analyses yielded similar results. The variability in RCI results indicates that a significant number of children did not make clinically significant improvements across settings and suggests that some children may need additional or different services.

Previous research on group interventions for SM have not used RCI analyses to examine within subject change. However, individual case results from weekly group treatment provided by Sharkey et al. (2008) suggest variability in children's response to treatment (i.e., 60% retained diagnostic status after treatment). Likewise, the treatment responder status used by Cornacchio et al. (2019) to indicate who benefitted from intensive treatment showed that about 55% of children responded to treatment at post-treatment and 62.5% responded by follow-up. Although almost all children in the current study continued meeting diagnostic criteria for SM and/or social anxiety after the SM Intensive, results of the current study broadly fall in line with the notion that not all children with SM will benefit from treatment.

Importantly, the current sample may have been more severely impaired than the sample in the group treatment study by Cornacchio et al. (2019). Indeed, mean ADIS CSR scores for the current sample are indicative of more severe SM and social anxiety, and parent-reported scores on the SMQ also suggest that the current sample spoke less at baseline. Specifically, the mean CSRs in the current sample were 5.36 (.96) for SM and 5.67 (1.03) for Social Anxiety whereas the mean SM CSR for the full sample in Cornacchio et al. (2019) was 4.9 (.7), and 4.8 (1.2) and 3.6 (1.6) for Social Anxiety at baseline for the treatment and waitlist groups, respectively (groups later combined for follow-up analyses on the ADIS). Furthermore, the average SMQ Home subscales at baseline in Cornacchio et al. (2019) ranged from 1.9 to 2.0 though in the current sample the average was 1.75. Likewise, the SMQ Social subscale in Cornacchio et al. (2019) ranged from .6 to .8 at baseline whereas the average was 0.5 in the current sample. It is possible that, similar to other RCTs conducted in

university settings, the complexity or severity of presentation was less than what may be seen in community settings (Westen et al., 2004). Children in the current sample were also, on average, over a year older than the Cornacchio et al. (2019) sample (7.86 years vs. 6.6 years). Although predictors of treatment response have not yet been researched for intensive group treatments for SM specifically, younger children may benefit more than older children in individual treatment for SM (Oerbeck et al., 2015) and pre-treatment severity may also be associated with treatment outcome (Catchpole et al., 2019).

Furthermore, two children in the SM Intensive had autism spectrum or communication disorders (pragmatic communication disorder) based on parent-report. Although there is some research on the comorbidity of developmental disorders and SM (e.g., Kristensen, 2000) and there are comparable verbal and nonverbal language impairments in SM and autism/pragmatic communication disorder (Carbone et al., 2010), the impact of disorders that also impair social communication on treatment for SM is not yet understood.

Summary of Quantitative Results: SM Weekly Group

Importantly, the onset of the COVID-19 pandemic in the Maryland, Virginia, District of Columbia area coincided with the beginning of the 3-month follow-up assessment period for the fall SM Weekly Group cohort. The pandemic also overlapped with the 6-week ADIS interview and 3-month follow-up for the winter SM Weekly Group cohort. Given changes to in-person socialization and educational activities, results from the 6-week ADIS and follow-up assessment should be cautiously interpreted. It is possible that parent-rated improvements at the 3-month

follow-up reflect an easement of speaking demands (e.g., fewer demands, more opportunities to speak with preferred individuals) and decrease in anxiety-provoking situations (e.g., school closures) instead of a true increase in speech and reduction in anxiety.

Effect sizes for parent-report of speech were negligible to small at post-treatment, and small to medium at follow-up. Effect sizes for parent-report of social and total anxiety were negligible at post-treatment and small at follow-up, and T-scores for social anxiety were clinically elevated at all time periods. ADIS interviews with parents revealed a slight increase in average SM CSR after treatment and a slight decrease in average social anxiety CSR following treatment. Average CGI-S scores increased following treatment, although CGI-I scores indicate minimal improvement for all participants with interviews. Children in the SM Weekly Group continued to meet diagnostic criteria for both SM and social anxiety at the follow-up ADIS.

Individual case outcomes assessed using RCI analyses of parent-report questionnaires also demonstrate variability in reported clinically significant improvements following the SM Weekly Group. At post-treatment, about 45% of parents reported clinically significant improvement in child speech at school, about a fourth of parents reported clinically significant improvements in speech in social settings and overall, and no parents reported improvements in speech at home. No parents reported clinically significant improvement in social anxiety or total anxiety. At 3-month follow-up, RCI analyses yielded similar results. Thus, children who participated in the SM Weekly Group exhibited limited clinical improvement following treatment suggesting questionable clinical utility of the program.

It is likely that the dose of treatment in the SM Weekly Group was insufficient to result in substantial improvement. SM has a reputation among clinicians as being difficult to treat (Sanetti & Luiselli, 2009) and as Vecchio and Kearney (2009) state, "Clinicians who address youths with selective mutism may have several daunting challenges before them" (p. 390). Vecchio and Kearney (2009) recommend collaborating with children, parents, and teachers in order to generalize speech and providing intensive clinical services (e.g., frequent sessions, extended treatment timeline, and exposures within community and school settings). Within this broad treatment framework, the SM Weekly Group lacks built-in collaboration, frequent sessions, and school-based exposures. It may best be viewed as an opportunity for exposures within the community. Indeed, the SM Program Directors conceptualize the group as a component of larger courses of intervention for children with SM. Still, given its base in PCIT-SM and exposure therapy, more substantial clinical improvement following treatment in the SM Weekly Group may be expected.

Summary of Quantitative Results: Teacher Report

The current study attempted to build on previous SM group treatment research by collecting teacher-reports of child speech in the school setting. However, few teachers completed the assessments resulting in significant missing data. RCI analyses were conducted only for those participants who had complete data. Notably, except for one participant, teachers who completed the pre-treatment SSQ were different individuals than those who completed the post-treatment and follow-up SSQs for the SM Intensive condition given the change in school years across assessment times. Because all assessments for the SM Weekly Group occurred across

one academic year, teachers were consistent across time points. However, due to COVID-19 school closures, no follow-up data are available. RCI analyses indicated that no teachers reported clinically significant improvement at post-treatment following the SM Weekly Group, one teacher reported clinically significant improvement at post-treatment following the SM Intensive, and no teachers reported clinically significant improvement at 3-month follow-up for the SM Intensive.

Given lack of data from teachers, it is difficult to interpret what changes may have occurred in child speech at school following treatment. Further, particularly for the SM Intensive, it is difficult to reconcile parent-reported improvements in speech at school with lack of notable change from teacher-reports. Future research may consider alternative ways of assessing child speech at school, for example by using trained independent evaluators to observe child speech during the school day across adult and peer interactions.

Discussion of Qualitative Results

Overall, interviews suggest that the SM Intensive and SM Weekly Group may be acceptable, appropriate, and feasible programs for all key stakeholders. Parents and counselors reported satisfaction with their experiences with the SM Intensive and/or SM Weekly Group. The SM Program Directors and Practice Owner, while satisfied with the programs, also acknowledged a desire to improve the programs to make them more effective and to enhance acceptability, appropriateness, and feasibility.

All individuals across all key stakeholder groups were interviewed separately. Interestingly, parents, counselors, and the Program Directors all discussed the role of

parents in treatment although the role of parents was not specifically probed by the interviewer. Many parents acknowledged that they knew that they needed to drive exposure practices in the community and yet parents, particularly of older children, reported that child resistance prevented practice. Counselors also reported that during interactions with children and parents, parents inadvertently reinforced the nonspeaking cycle, suggesting that parents may not have mastered the skills needed to promote child speech. The Program Directors view parents as integral to the whole of SM treatment for children and as the interventionists needed to promote generalization. Although the Program Directors enroll children into the group programs based on perceived readiness for generalization and acknowledge that parents are needed to enhance and sustain generalization, parents are only provided with very brief parent training (e.g., 1-2 hours) during the course of the group treatments. The Program Directors stressed the need for multimodal treatment and emphasized that the SM Intensive and SM Weekly Group are not stand-alone interventions (i.e., they should co-occur with individual parent training and child therapy as well as school consultation); however, treatment update data collected at post-treatment and follow-up suggested that very few children received additional services following the end of the group program. The Program Directors and parents appear similarly aligned on the general purpose of the groups—to provide children with SM additional opportunities for exposures. Nevertheless, results of the qualitative interviews suggest that there may be a disconnect about the generalization process or barriers to generalization that need to be addressed in order to promote child speaking across settings.

Potential barriers to generalization may be gleaned from the qualitative interviews. Cost of services and accessibility of services emerged as factors that parents considered when enrolling in the SM Intensive or SM Weekly Group. Parents reported that although the cost of services seemed fair compared to similar programs in the area and relative to the cost of individual therapy, the cost of the group programs was still high. Parents also needed to invest time in the programs (i.e., transportation, fade-ins). Given that time and money are limited resources, it is possible that parents are unable or unwilling to make the investments in treatment needed to provide children with comprehensive and multimodal services. In these instances, it is incumbent on clinicians to help families prioritize treatment goals, provide feasible treatment options, and educate parents on reasonable expectations for behavior change based on treatment plans. It may also be the case that some parents need additional psychoeducation to understand clinician treatment recommendations.

The SM Program Directors encourage parents to make use of clinician-facilitated school generalization sessions. However, only five of the 22 children enrolled in the study reportedly received school fade-in services. Information shared in the parent and Program Director interviews suggested that barriers to this included cost (clinician travel fees + therapy fees), licensing issues (for out-of-state children), and school difficulties (e.g., no permission from school for outside provider to come in to consult or provide trainings).

SM Intensive and SM Weekly Groups: A Descriptive Comparison

Although the current study evaluated two treatment programs, the study was not designed to directly compare the interventions. The programs operate using the

same treatment techniques and principles but vary greatly in dose of treatment and frequency of sessions. Furthermore, the timing of the programs differs, with the SM Intensive held in August and the SM Weekly Groups running during the academic year. However, given concerns about the financial burden of treatment and the low feasibility of engaging in each available treatment program due to limited resources (i.e., time and money), there is value in comparing the programs in order to foster improved clinical recommendations for families and practices.

Despite the fact that both programs showed mixed results when RCIs and effect sizes are considered, it appears that the SM Intensive may outperform the SM Weekly Group. That is, participation in the SM Intensive may result in more clinical improvements than engagement in the SM Weekly Group. Given that SM is difficult to treat, it is not surprising that a higher dose of intensive treatment results in more positive change.

Qualitatively, parents of children enrolled in the SM Intensive as well as parents of those enrolled in the SM Weekly Group spoke favorably of the programs and appeared to report similar perceptions of acceptability and appropriateness. However, feasibility for families attending one program or the other appears to be variable and dependent on individual circumstances due to differences in when the programs are held. Counselors perceptions of the SM Intensive and SM Weekly Groups were also favorable and largely consistent across programs, with individual circumstances and preferences factoring into feasibility of participating. The SM Weekly Group may be more feasible for practice settings, though this too is likely to

vary depending on individual setting variables (e.g., business model, space, administrative supports).

Mixed Methods

RCI and effect size analyses reveal variability in treatment effectiveness for both the SM Intensive and SM Weekly Group programs. Despite variability in improving speech and reducing anxiety, such that many children exhibited minimal, if any, improvement, parents were overwhelmingly positive in their experiences with the programs. Parents in both the SM Intensive and SM Weekly Groups spoke favorably of the treatments. This high level of satisfaction was also endorsed on the CSQ-8, which was completed independent of the qualitative interviews.

However, given the family investments required for participation in the programs, one might think that parents would be more critical if their child did not exhibit greater improvements following treatment. Notably, many parents completed the qualitative interview prior to completing post-treatment questionnaires. Thus, it may be the case that the timing of interviews did not permit parents sufficient time to gauge improvements (or lack thereof). It is also possible that, despite assurances that participation in the research was confidential and would not affect future treatment with the practice/clinicians, parents may have been uncomfortable providing criticism.

The mismatch between parent satisfaction and clinical change is a discrepancy that exists, in part, due to how treatment effectiveness was measured. Thus, it is also possible that when considering their satisfaction, parents may have reflected on benefits not measured on questionnaires. For example, many parents indicated that

they enrolled their child in the programs because of opportunities for exposure practices. The questionnaires explicitly assessed speech and anxiety which, although related to involvement in exposure practices, may have been too far removed from the construct of "opportunity" to correlate with parents' perceptions of the programs.

Despite the mismatch between effectiveness and parent satisfaction, the qualitative information provided by parents provides an understanding of factors that contribute to perceptions of program acceptability, appropriateness, and feasibility. This information may still inform practice and clinical decisions regarding services offerings and treatment recommendations and may be useful information toward continuing treatment engagement.

Limitations

The greatest limitations to the current study include the small sample size and missing data at follow-ups. Although precautions were taken to reduce participant burden, it may be the case that parents continued to view research participation as burdensome. Because participation still required numerous hours of involvement, parents received minimal to no incentives for participation, and parents paid out of pocket for the treatments under evaluation, it is possible that they either declined enrollment or dropped out of the study due to burden and lack of motivation. Notably, parents were more likely to complete the online questionnaires than they were to complete the ADIS and qualitative interviews, suggesting that the time required to do the interviews may have been particularly problematic.

Missing teacher data is another limitation. Although teachers were invited to participate in the study by completing brief online questionnaires, few teachers signed

consent forms and provided data. Parents were encouraged to reach out to teachers to urge their participation, but it is not known if parents also prompted teachers. It is possible that teachers may have been more responsive to the questionnaires if they were provided by parents directly or from the treating clinicians.

Although one goal of the current study was to demonstrate the effectiveness of group interventions for SM outside of university and hospital settings, it is important to acknowledge that the community settings in which the programs were held may not be representative of other community-based treatment sites. Alvord Baker and Brighter Outlook are self-pay private practices located outside of Washington, DC with established relationships with clinical psychology doctoral programs at nearby universities. These relationships played an important role in program feasibility. Without volunteers, the cost of treatment may increase, further decreasing affordability and access. Furthermore, families enrolled in the current study may also not be representative of other families of children with SM. Parents in the current study frequently reported high levels of education and high household incomes. Thus, it is possible that treatment outcomes or stakeholder views of early implementation outcomes may not generalize to differently-resourced settings. Future research is needed to examine less cost prohibitive methods of delivering these treatments to a wider range of children and families (e.g., in schools).

An additional limitation is the use of an open-trial design. Although necessary to use this design within the community practice setting, RCTs are the gold standard method of testing treatment effectiveness (Des Jarlais, Lyles, & Crepaz, 2004). However, issues of feasibility and ethics may preclude the use of RCTs (Victora,

Habicht, & Bryce, 2004) and RCT-alternatives, such as using clinical practices as naturalistic settings to systematically study interventions, should be considered in determining empirical support for treatment programs (Westen , Novotny, & Thompson-Brenner, 2004). The sample size for both treatment conditions was also small, limiting the statistical analyses that could be conducted and the conclusions that can be drawn. The need to maintain patient confidentiality limited the research team's ability to communicate with potential participants to those who gave written permission to the SM Program Directors to share contact information, resulting in approximately half of families in each treatment cohort enrolling to participate in the research.

Another limitation is that the current study did not assess the fidelity of treatment skill use across counselors. Treatment fidelity was also not routinely monitored or measured as standard practice in the SM Intensive or SM Weekly Group. Training for counselors was somewhat variable and did not exceed 4 hours of in-person instruction and practice, reflecting the demanding schedules of clinicians and the desire to maintain low burden for the volunteers. Although maintaining feasibility by managing time commitments for both clinicians and volunteers is necessary, ensuring that treatment is delivered as intended is critical for understanding program effectiveness. Regarding training, it may be the case that brief training is sufficient given the on-going feedback and supervision provided during the treatment sessions by the Program Directors as well as the alignment of theoretical orientation with the volunteers' training programs. However, including training

mastery criteria and fidelity checks during treatment (e.g., Cornacchio et al., 2019) would permit stronger conclusions to be drawn regarding treatment effectiveness.

Lastly, there are limitations regarding assessment. First, this study assessed treatment history using a questionnaire. Using additional assessment techniques, like parent interviews and record reviews, would allow for a more thorough understanding of each child's course of treatment. More complete treatment histories may enhance our understanding of the treatment doses and types needed to prepare children for entry into the SM Intensive or SM Weekly Group, for success within the groups, and for maintenance of speaking gains after group treatment. Second, this study used diagnostic interviews but the interviewers (the author and a small team of doctoral students) were not blind to treatment condition or assessment time point. The timing of assessments, particularly for the SM Intensive, is also problematic in that it may be difficult for parents and teachers to accurately report on child speech and impairment during the summer. Finally, although the study used commonly used measures of SM (i.e., SMQ, SSQ), these measures focus entirely on speech and, therefore, are likely to miss treatment gains in other approach behaviors (e.g., improvements in nonverbal interactions, improvements in very brief verbalizations or in quality of speech).

Clinical Implications

The SM Intensive and SM Weekly Group programs are theoretically sound interventions for the treatment of SM. That is, the programs draw from exposure-based interventions, behavioral principles of reinforcement, and Parent-Child Interaction Therapy. Given their evidence-based foundations, one may expect that the SM Intensive and SM Weekly Groups would result in more treatment gains than

results of the current study suggest. Indeed, findings of the current study are mixed. Results from the SM Intensive suggest that not all children benefit from the program and most continued to meet diagnostic criteria for SM and social anxiety. As such, the SM Intensive may be a potentially effective treatment component within the context of a broader course of treatment for children with SM. Although quantitative results from the SM Weekly Group do not indicate considerable gains from participation in the program, the SM Weekly Group provides opportunities for supported exposures using evidence-based techniques and, as such, may be a valuable adjunct intervention in the treatment of SM, though additional work is required to increase potential for effectiveness (e.g., increase number of sessions) and subsequent research is needed to determine the clinical value of the SM Weekly Group. These mixed results, paired with treatment necessitating the use of limited resources (e.g., time and money), underscore the need for clinicians to engage parents in thoughtful and methodical treatment planning, complete with thorough psychoeducation about treatment needs for SM. It may be the case that clinicians need to enact more stringent criteria for children and parents to demonstrate readiness for treatment generalization before enrolling in group programs.

Because the SM Intensive and SM Weekly Groups require numerous resources, it is important to acknowledge that, in many ways, the settings, clinicians, and clientele for the SM programs may represent an ideal scenario for treatment. The practice settings in the current study may be better resourced than many other treatment settings, particularly with respect to clinician education and specialized training, proximity to high level graduate programs from which to recruit volunteer

counselors, and ability to sustain practice with self-pay clients. Furthermore, parents of children enrolled in the programs typically reported high levels of education, with many parents reporting graduate degrees, two parent households, and average incomes well above the national median. As parents described during qualitative interviews, job flexibility, financial means, and spouse support contributed significantly to the ability to enroll children in the SM programs.

Despite these advantages, results of the current study are variable. Considering the advantageous circumstances, the results beg the question: if the programs do not work well under more ideal circumstances, how would they result in meaningful improvement under less ideal conditions? Assuming that treatment effectiveness can be enhanced in the current programs, it will be important to consider how treatment may need to be modified for other settings or populations to ensure that children and families presenting with more treatment barriers are able to access and benefit from the programs.

To enhance the programs, treatment focus may need to expand to also target exposure practice outside of session during the SM Intensive week and between SM Weekly Group meetings. Given the age of children enrolled in the programs as well as the nature of their presenting difficulties, including parents in treatment may increase the likelihood of between session practice being completed. However, this would likely entail programming explicit parent instruction regarding developing exposures and prompting and rewarding speech into the treatment programs. Although the programs offer some parent meetings, these meetings are likely insufficient (e.g., 1 hour for SM Weekly Group; 2 hours for SM Intensive) to train

parents to use behavioral skills with fidelity and increased treatment time focused on parent training may be required. While preparing parents to serve as primary interventionists for generalization and including between session assignments may require restructuring the programs, these changes would likely serve to improve generalization efforts.

Parents may be able to manufacture exposure practices with peers, in public settings, and with extended family, improving speech in school settings may require additional considerations. Well-meaning teachers and school personnel may reinforce non-speaking behaviors through accommodations that promote speech avoidance. Providing parents and teachers with specific psychoeducation about behavioral reinforcement principles and strategies for promoting and reinforcing speech may help to break the avoidance cycle of non-speaking. Thus, it is also likely that generalization to the school setting needs to be targeted more specifically. School fade-in sessions or consultations were not required as part of treatment in either the SM Intensive or SM Weekly Group, though they were reportedly highly recommended. Use of fade-ins or consultations after treatment were, per parent report, low. Reasons for poor use of school generalization services may have been financial (e.g., cost prohibitive), logistical (e.g., clinician not licensed in child's home state), and/or school-based (e.g., no permission for outside clinician to provide services). The data from this study provide a cursory understanding that clinician-provided intervention at schools is underutilized. However, additional research is needed to better understand service utilization in this domain as well as what services, if any, schools provide to children with SM and the effectiveness of these services.

For practice settings, the feasibility and sustainability of running SM Intensive or SM Weekly Group programs will likely vary depending on business models and be strongly influenced by clinician interests and clinicians' and practices' footholds in the community. The feasibility of the programs will likely also vary depending on the ability of the practice setting to have volunteer counselors participate in the programs. Furthermore, parents must view the programs as potentially helpful for their child and worth the resources that would be invested (e.g., Stevens et al., 2006).

Future Directions

SM is a difficult to treat disorder. Retrospective studies suggest that SM remits or improves over time, but adults with a history of SM are at risk of maladjustment, including high rates of phobic and psychiatric disorders, psychosocial impairment, poor social and communication skills, and high unemployment (Remschmidt et al., 2001; Steinhausen et al., 2006). Furthermore, after key symptoms of SM dissipate, children who had SM continue to perform poorly at school (Remschmidt et al., 2001; Steinhausen et al., 2006). Because SM is associated with poor outcomes, it is important to effectively intervene in order to promote healthy developmental trajectories. Given the difficulty of treating SM, intensive and multimodal approaches are warranted.

Parents in the current study noted that the cost of treatment was high and likely unaffordable for many families. This sentiment was also shared by the SM Program Directors and acknowledged by the Practice Owner. Not surprisingly, cost of treatment plays a role in service utilization and may be a factor in attrition from treatment (e.g., Stevens, Harman, & Kelleher, 2005). Additional research is needed to

understand service utilization among families of children with SM, including an examination of facilitators and barriers to parental follow-through with clinician treatment recommendations for multimodal services. Economic evaluations (i.e., program cost, cost-effectiveness, cost-benefit) for SM treatment may also be helpful in supporting decision-making given limited resources (Elliott & Payne, 2004). Future research is also needed to understand the unique contribution of the group program to speech generalization by evaluating the programs relative to other treatment components (i.e., individual child therapy, parent training, school consultation).

Although parents did not participate in the SM Intensive and rarely were involved in the SM Weekly Groups (for extended fade-ins), the role of parents in treatment emerged during qualitative interviews. Because parents likely need to be the primary interventionists for children with SM in the long-term, additional research should evaluate dose of parent training needed for parents to master the skills necessary for conducting exposures and practice differential reinforcement. Future research should also closely examine parents' use of behavioral skills outside of therapy appointments or group treatment programs in order to understand the unique contributions that each treatment component makes to improving child speech and decreasing impairment.

Importantly, although parents play an important role in intervention, teachers also spend a significant amount of time with children. Further, teachers interact with children in the setting in which many children with SM struggle (Cunningham et al., 2004). Future research should explore teachers' use of behavioral interventions to

improve child speech in the classroom as well as the effectiveness of collaborative efforts between clinicians, parents, and teachers to intervene in school settings. Teacher-child interaction training (TCIT) is an adaptation of PCIT that applies the foundational principles and skills of PCIT in classroom settings and may serve as a model, adapted similarly to PCIT-SM, for training educators to work with children with SM (Lieneman et al., 2017). Notably, teachers face significant work burdens and involving other school personnel (e.g., school counselors or psychologists, paraprofessional aides) or non-school professionals (e.g., treating clinicians) may increase the feasibility of receiving treatment within the school setting.

The current treatment programs operate under a model of SM in which non-speaking is assumed to be an escape-maintained behavior (Zakszeski & DuPaul, 2017). However, it may be the case that for some children non-speaking may serve a different behavioral function or combination of behavioral functions. For these children, the SM Intensive or SM Weekly Group may not be effective treatments and individualization to assess and target the unique maintaining functions would be required. Future research should evaluate behavioral functions and topographies for children with SM. Such research will provide a more solid behavioral foundation from which clinicians can individualize treatment to maximize effectiveness. Because the SM Intensive and SM Weekly Group use one-on-one counselors, it may be possible to further individualize treatment to ensure that maintaining functions are adequately addressed.

Conclusion

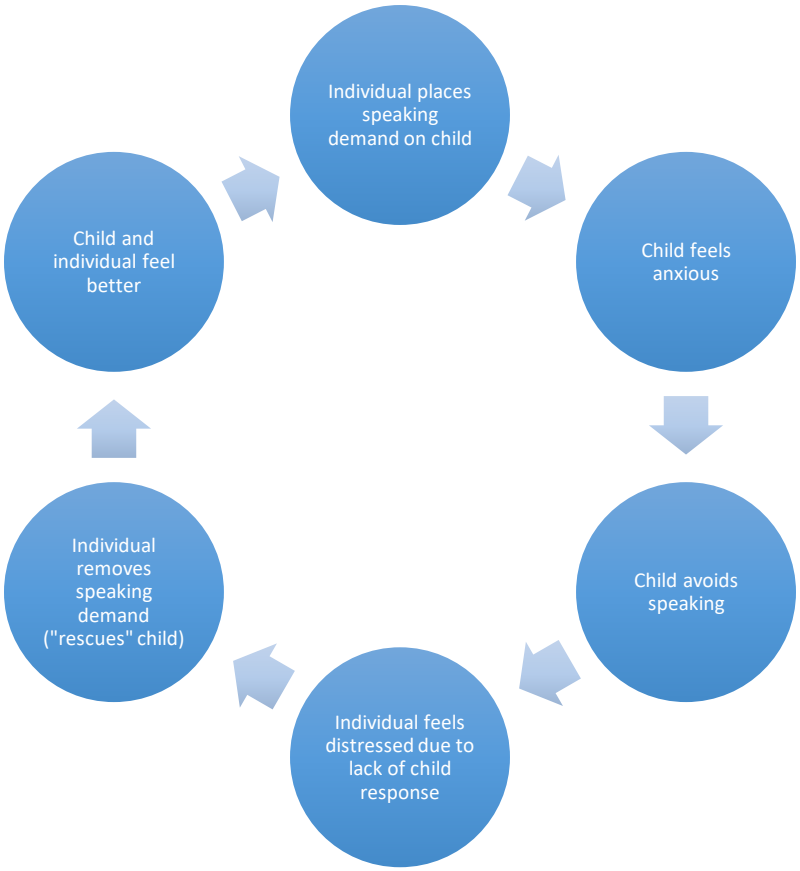
This study is the first is to empirically evaluate intensive treatment for SM in a community private practice setting and the second to evaluate a weekly group treatment program. Importantly, it is also the first study to qualitatively examine implementation factors associated with group treatments for SM. As emphasized by the SM Program Directors, the SM Intensive and SM Weekly Groups included in this study are not intended to be stand-alone interventions. Rather, the programs provide additional opportunities for exposures with peers and adults across a variety of activities and settings for children who may be ready to generalize speech.

An evaluation of within subject improvement shows variability that suggests many children did not demonstrate clinically significant improvements. Thus, it is imperative to determine who may be the most likely to benefit from this resource-intensive treatment program. Though larger scale research trials are needed to determine moderators of treatment outcome, clinicians may be encouraged to consider implementing more stringent program entry criteria. Few improvements are noted following the SM Weekly Group and adjustments to the program are likely warranted to improve effectiveness. Such changes may include, but are not limited to, including parents in sessions, increasing treatment time per session, increasing the number of sessions, or reducing time between sessions (i.e., 2 hours per session, 3 sessions per week). Results for both treatment program suggest limited generalization of speech. As such, reformatting the programs to include additional parent training and school consultation (e.g., Cornacchio et al., 2019; Lorenzo et al., 2020) may help to improve generalization.

Qualitative analyses suggest that key stakeholders, including the SM Program Directors, Practice Owner, counselors, and parents, find the SM Intensive and SM Weekly Group to be acceptable, appropriate, and feasible for the treatment of SM. The SM Intensive may provide therapeutic benefit to some children and should be considered a potentially effective component of treatment. The SM Weekly Group likely requires adjustments to become a possibly effective treatment program, yet because (like the SM Intensive) it is grounded in sound behavioral principles for the treatment of anxiety, adjustments to timing (e.g., readiness for group) and dose may be viable solutions to increase effectiveness.

Figures

Figure 1. Maintenance cycle of non-speaking behavior through negative reinforcement.



Tables

Table 1

Measures Timeline

Measure	Informant	Pre-Treatment	Post-Treatment	6-Week Follow-Up	3-Month Follow-Up
Demographics	Parent	X			
Treatment History and Updates	Parent	X	X		X
ADIS	Parent	X		X	
SMQ	Parent	X	X		X
SSQ	Teacher	X	X (SM Weekly)	X (SM Intensive)	X
SAS	Parent	X	X		X
BASC-3	Parent	X			
CSQ-8	Parent		X		
Qualitative Interviews	Parent Counselors Developers/Supervisors Practice Owner		X		

Note. ADIS = Anxiety Disorders Interview Schedule; SMQ = Selective Mutism Questionnaire; SSQ = School Speech Questionnaire; SAS = Spence Anxiety Scale; BASC-3 = Behavior Assessment System for Children, Third Edition; CSQ-8 = Client Satisfaction Questionnaire-8

Table 2

Participant Demographics and Clinical Characteristics

	SM Intensive Camp (n = 14)	SM Weekly Group (n = 8)
Demographic Characteristics		
Mean Age (SD)	7.86 (2.98)	6.5 (1.78)
Child Sex		
Male	6	1
Female	8	7
Ethnicity		
Hispanic/Latino	1	1
Race		
Caucasian	8	7
Asian	2	1
Multiracial	4	0
Family Income	$161,875($55,545) (n = 8; $60k-260k)	$161,000 ($90,857) (n = 5; $25k-260k)
Marital Status		
Married	12	7
Separated/Divorced	2	1
Parental Education (primary and co-parent)		
High school or equivalent	2	0
Associate's or equivalent	1	1
Bachelor's or equivalent	5	3
Master's or equivalent	12	10
Doctorate or equivalent	7	2
BASC-3 Baseline Clinical Characteristics (T-scores)		
Externalizing Problems	46.5 (6.07)	47.1 (7.16)
Internalizing Problems	47.2 (10.3)	52.1 (11.1)
Behavioral Symptoms Index	53.3 (7.42)	53.0 (5.35)
Adaptive Skills	37.9 (7.3)	39.4 (6.23)
Developmental Social Disorders	60.2 (8.67)	57.8 (6.02)
Parent-reported autism spectrum or communication disorder	2	0

Note. BASC-3 = Behavior Assessment System for Children, Third Edition; SD = Standard Deviation; SES = Socioeconomic Status

Table 3

Treatment History

	SM Intensive Camp			SM Weekly Group		
	Pre (n = 14)	Post (n = 14)	FU (n = 12)	Pre (n = 8)	Post (n = 7)	FU (n = 5)
Pre-Treatment						
Any current pharmacotherapy for SM (other than group)	3	--	--	0	--	--
Any current psychosocial treatment	9	--	--	1	--	--
Any past psychosocial treatment	9	--	--	4	--	--
Post-Treatment						
Any school fade-ins	---	5	--	--	0	--
Any psychosocial treatment	---	3	--	--	0	--
3-Month Follow-Up						
Any psychosocial treatment	---	--	4	--	--	1

Note. Numbers reflect participants who indicated receiving services.

Table 4

ADIS Means, Standard Deviations, and Effect Sizes

	SM Intensive Camp		SM Weekly Group	
	Pre (n = 13)	6-Week Follow-Up (n = 4)	Pre (n = 5)	6-Week Follow-Up (n = 3)
Selective Mutism CSR	5.38 (.96)	4.5 (1.73)	5.2 (2.39)	5.67 (.58)
Hedges' g		0.72		-0.21
	Pre (n = 6)	Follow-Up (n = 4)	Pre (n = 5)	Follow-Up (n = 3)
Social Anxiety CSR	5.67 (1.03)	4.75 (.96)	5.2 (1.3)	5.0 (1.0)
Hedges' g		0.82		0.14
CGI-S	5.5 (.84)	4.75 (.96)	5.0 (1.73)	5.33 (.58)
CGI-I		3.0 (1.41)		3.0 (0)

Note. CSR = Clinician Severity Rating; CGI-S = Clinical Global Impression-Severity; CGI-I = Clinical Global Impression-Improvement. A CSR of 4 or more indicates that the child met diagnostic criteria for the disorder. Higher CGI-S numbers indicate greater severity. A CGI-I of 4 indicates no improvement, while lower numbers indicate greater improvement and higher numbers indicate deterioration. Effect sizes represent differences between pre-treatment and 6-week follow-up scores.

Table 5

Parent-report Questionnaires: Means and Standard Deviations

	SM Intensive Camp			SM Weekly Group		
	Pre (n = 14)	Post (n = 14)	FU (n = 12)	Pre (n = 8)	Post (n = 7)	FU (n = 5)
SMQ						
School	0.69 (.57)	1.64 (1.07)	1.18 (.99)	0.94 (.73)	1.21 (.90)	1.37 (.90)
Home/Family	1.75 (.62)	2.15 (.51)	2.29 (.52)	2.1 (.65)	2.24 (.52)	2.0 (.67)
Social	0.50 (.79)	1.51 (1.14)	0.95 (.78)	0.73 (.93)	0.86 (.81)	1.12 (1.12)
Total	1.01 (.44)	1.79 (.80)	1.50 (.62)	1.29 (.67)	1.47 (.65)	1.52 (.86)
School Impairment	1.21 (.98)	1.93 (.73)	1.25 (.87)	1.5 (.92)	1.71 (1.11)	1.8 (1.1)
Home/Fam. Impairment	1.43 (1.02)	1.64 (1.01)	1.17 (.72)	1.75 (.71)	0.86 (1.07)	0.8 (.84)
Social Impairment	1.43 (1.09)	2.50 (.65)	2.00 (.60)	2.38 (.52)	2.14 (1.07)	1.8 (1.1)
Overall Impairment	1.43 (1.02)	2.07 (.48)	1.92 (.79)	2.13 (.99)	1.86 (.90)	1.8 (.45)
Spence Anxiety Scale						
Social Anxiety	65.5 (13.2)	61.1 (12.9)	59.2 (13.0)	65.9 (15.5)	63.4 (15.3)	60.4 (17.2)
Total Anxiety	58.2 (13.9)	53.8 (11.4)	52.3 (12.9)	58.9 (14.0)	57.7 (12.3)	53.8 (10.9)

Note. Pre = Pre-treatment. Post = Post-treatment. FU = 3-month Follow-up.
SMQ = Selective Mutism Questionnaire. Higher scores on the general SMQ scales indicate greater speaking. Higher scores on the SMQ impairment scales indicate greater impairment.
Scores for the Spence Anxiety Scale are represented as T-scores and higher T-scores indicate greater anxiety.

Table 6

Parent-report Questionnaires: Effect Sizes

	SM Intensive Camp		SM Weekly Group	
	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 7)	Pre-FU (n = 5)
SMQ				
School	-1.08	-0.60	-0.31	-0.50
Home/Family	-0.68	-0.91	-0.22	0.14
Social	-1.0	-0.56	-0.14	-0.36
Total	-1.17	-0.90	-0.26	-0.29
School Impairment	-0.81[T]	-0.04	-0.19[T]	-0.28[T]
Home/Fam. Impairment	-0.20[T]	0.28	0.94	1.16
Social Impairment	-1.16[T]	-0.61[T]	0.28	0.69
Overall Impairment	-0.78[T]	-0.52[T]	0.27	0.37
Spence Anxiety Scale				
Social Anxiety	0.33	0.47	0.15	0.32
Total Anxiety	0.34	0.43	0.09	0.37

Note. Pre = Pre-treatment. Post = Post-treatment. FU = 3-month Follow-up. SMQ = Selective Mutism Questionnaire. All effect sizes are quantified as Hedges' g, whereby effects of 0.2 are considered small, 0.5 medium, and 0.8 large. Effect sizes represent differences between pre-treatment and post-treatment scores and pre-treatment and 3-month follow-up scores. [T] indicates the effect size is in the opposite of the expected direction

Table 7

Parent-Report Questionnaires: Reliable Change Indices

	SMQ School		SMQ Home/Family		SMQ Social		SMQ Total		Spence Social Anxiety		Spence Total Anxiety	
	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 14)	Pre-FU (n = 12)	Pre-Post (n = 14)	Pre-FU (n = 12)
SM Intensive												
RC+	7 (50%)	5 (41.6%)	5 (35.7%)	5 (41.6%)	7 (50%)	7 (58.3%)	8 (57.1%)	9 (75%)	4 (28.6%)	2 (16.6%)	2 (16.6%)	2 (16.6%)
RC0	4 (28.5%)	5 (41.6%)	9 (64.3%)	6 (50%)	7 (50%)	5 (41.6%)	5 (35.7%)	2 (16.6%)	10 (71.4%)	9 (75%)	12 (85.7%)	10 (83.3%)
RC-	3 (21.4%)	2 (16.6%)	0	1 (8.3%)	0	0	1 (7.1%)	1 (8.3%)	0	1 (8.3%)	0	0
	Pre-Post (n = 7)	Pre-FU (n = 5)	Pre-Post (n = 7)	Pre-FU (n = 5)	Pre-Post (n = 7)	Pre-FU (n = 5)	Pre-Post (n = 7)	Pre-FU (n = 5)	Pre-Post (n = 7)	Pre-FU (n = 5)	Pre-Post (n = 7)	Pre-FU (n = 5)
SM Weekly Group												
RC+	3 (42.9%)	3 (60%)	0	0	2 (28.6%)	1 (20%)	2 (28.6%)	3 (60%)	0	0	0	1 (20%)
RC0	3 (42.9%)	2 (40%)	7 (100%)	5 (100%)	3 (42.9%)	4 (80%)	5 (71.4%)	2 (40%)	6 (85.7%)	4 (80%)	7 (100%)	4 (80%)
RC-	1 (14.3%)	0	0	0	2 (28.6%)	0	0	0	1 (14.3%)	1 (20%)	0	0

Note. Pre = Pre-treatment. Post = Post-treatment. FU = 3-month Follow-up. SMQ = Selective Mutism Questionnaire. RC+ = Reliable Improvement. RC0 = Indeterminate Change. RC- = Reliable Deterioration. Analyses reflect changes from pre-treatment to post-treatment and pre-treatment to 3-month follow-up.

Table 8

School Speech Questionnaire: Means and Standard Deviations

	SM Intensive Camp			SM Weekly Group	
	Pre (n = 8)	Post (n = 7)	3-mo FU (n = 4)	Pre (n = 4)	Post (n = 4)
Total	0.79 (0.53)	0.86 (1.08)	0.67 (0.53)	1.04 (0.48)	1.29 (0.77)
Impairment	1.88 (0.99)	1.71 (1.11)	1.5 (0.58)	1.75 (0.5)	1.75 (0.5)

Note. Pre = Pre-treatment. Post = Post-treatment. FU = 3-month Follow-up. Higher Total scores indicates more speaking behavior. Higher Impairment scores indicates greater impairment.

Table 9

School Speech Questionnaire: Reliable Change Indices and Effect Sizes

	SM Intensive Camp		SM Weekly Group
	Pre-Post (n = 4)	Pre-FU (n = 2)	Pre-Post (n = 4)
Total			
RC+	1	0	0
RC0	2	1	4
RC-	1	1	0
Hedges' g			
Total	-0.08	0.21	-0.34
Impairment	0.15	0.40	0.0

Note. Pre = Pre-treatment. Post = Post-treatment. FU = 3-month Follow-up. RC+ = Reliable Improvement; RC0 = Indeterminate Change; RC- = Reliable Deterioration. Analyses reflect changes from pre-treatment to post-treatment and pre-treatment to 3-month follow-up.

Appendices

Appendix A

Demographics Form

Demographics Form

Information about your child

1. Child's Date of Birth: _____
2. Child's Age (in years): _____
3. Child's Gender:
    1. Female
    2. Male
    3. Other (Specify: _____)
    4. Prefer not to say
4. Child's Ethnicity
    1. **NOT** Hispanic or Latino
    2. Hispanic or Latino
5. Child's Race (please mark only one)
    1. Caucasian
    2. African-American
    3. Asian
    4. American Indian or Alaska Native
    5. Native Hawaiian or Other Pacific Islander
    6. Bi- or multi-racial (Specify: _____)
    7. Other (Specify: _____)
6. Child's school or daycare: _____ | Grade level (current or recently completed): ___
7. How many hours/days does your child attend school?: _____hours _____days/week
8. How many years has your child been in daycare/school: _____

Information about yourself (primary parent)

Contact Information
Name:
Mailing address:
Email address:
Phone number:

1. Your Date of Birth: _____
2. Your Age (in years): _____
3. Your Gender:
    1. Female
    2. Male
    3. Other (Specify: _____)
    4. Prefer not to say
4. Your Ethnicity
    1. **NOT** Hispanic or Latino
    2. Hispanic or Latino
5. Your Race (please mark only one)
    1. Caucasian

2. African-American
3. Asian
4. American Indian or Alaska Native
5. Native Hawaiian or Other Pacific Islander
6. Bi- or multi-racial (Specify: _____)
7. Other (Specify: _____)

6. Please choose which of the following best describes your relationship with the child:
    1. Biological Mother
    2. Biological Father
    3. Adoptive Mother
    4. Adoptive Father
    5. Step-Mother
    6. Step-Father
    7. Other (Specify: _____)
7. What is the highest educational degree you have completed?
    1. Some high school
    2. High school diploma or equivalent
    3. Some college
    4. Associate's degree or equivalent
    5. Bachelor's degree or equivalent
    6. Master's degree or equivalent
    7. Doctoral degree or equivalent
    8. Other (Specify: _____)
8. What is your marital status?
    1. Never married
    2. Married
    3. Separated
    4. Divorced
    5. Widowed
9. Have you ever been diagnosed with a psychiatric disorder?
    1. Yes
    2. No
    3. Prefer not to say

    If Yes, please indicate any psychological problems you are currently experiencing or have experienced in the past:
        1. Anxiety Disorder
        2. Depressive Disorder
        3. Obsessive-Compulsive Disorder
        4. Bipolar Disorder
        5. Attention-Deficit/Hyperactivity Disorder
        6. Substance Use Disorder
        7. Post-Traumatic Stress Disorder
        8. Schizophrenia Spectrum or Psychotic Disorder
        9. Eating Disorder
        10. Other (Specify)
        11. Prefer not to say

10. Are you currently taking medication for a psychiatric disorder?
    1. Yes
    2. No
    3. Prefer not to say

    If Yes, please indicate what type of medication(s) you are taking:
    1. Antidepressant [i.e., Prozac (fluoxetine), Zoloft (sertraline), Wellbutrin (bupropion)]
    2. Antianxiety [i.e., Xanax (alprazolam), Ativan (lorazepam), Valium (diazepam)]
    3. Mood Stabilizer [i.e., Depakote (valproic acid), Lithobid (lithium carbonate)]
    4. Stimulant [i.e., Ritalin (methylphenidate), Adderall (amphetamine)]
    5. Non-stimulant ADHD medication (i.e., Strattera (atomoxetine)]
    6. Other (Specify)
    7. Prefer not to say
11. Are you currently receiving psychotherapy for a psychiatric disorder?
    1. Yes
    2. No
    3. Prefer not to say

    If Yes, please indicate which type(s) of treatment you are receiving:
    1. Individual therapy
    2. Group therapy
    3. Family therapy
    4. Self help groups (e.g., Alcoholics Anonymous)
    5. Other (Specify)
    6. Prefer not to say
12. Approximate total yearly family income (before taxes)
    1. $_____
    2. Prefer not to say

Information about co-parent

1. Date of Birth: _____
2. Age (in years): _____
3. Gender:
    1. Female
    2. Male
    3. Other (Specify: _____)
    4. Prefer not to say
4. Ethnicity
    1. **NOT** Hispanic or Latino
    2. Hispanic or Latino
5. Race (please mark only one)
    1. Caucasian
    2. African-American
    3. Asian
    4. American Indian or Alaska Native

5. Native Hawaiian or Other Pacific Islander
6. Bi- or multi-racial (Specify: _____)
7. Other (Specify: _____)

6. Please choose which of the following best describes the co-parent's relationship with the child:
    1. Biological Mother
    2. Biological Father
    3. Adoptive Mother
    4. Adoptive Father
    5. Step-Mother
    6. Step-Father
    7. Other (Specify: _____)
7. What is the highest educational degree the co-parent has completed?
    1. Some high school
    2. High school diploma or equivalent
    3. Some college
    4. Associate's degree or equivalent
    5. Bachelor's degree or equivalent
    6. Master's degree or equivalent
    7. Doctoral degree or equivalent
    8. Other (Specify: _____)
8. What is your co-parent's marital status?
    1. Never married
    2. Married
    3. Separated
    4. Divorced
    5. Widowed
9. Has the co-parent ever been diagnosed with a psychiatric disorder?
    1. Yes
    2. No
    3. Prefer not to say

    If Yes, please indicate any psychological problems the co-parent is currently experiencing or has experienced in the past:
    1. Anxiety Disorder
    2. Depressive Disorder
    3. Obsessive-Compulsive Disorder
    4. Bipolar Disorder
    5. Attention-Deficit/Hyperactivity Disorder
    6. Substance Use Disorder
    7. Post-Traumatic Stress Disorder
    8. Schizophrenia Spectrum or Psychotic Disorder
    9. Eating Disorder
    10. Other (Specify)
    11. Prefer not to say
10. Is the co-parent currently taking medication for a psychiatric disorder?
    1. Yes

2. No
3. Prefer not to say

If Yes, please indicate what type(s) of medication the co-parent is taking:

1. Antidepressant [i.e., Prozac (fluoxetine), Zoloft (sertraline), Wellbutrin (bupropion)]
2. Antianxiety [i.e., Xanax (alprazolam), Ativan (lorazepam), Valium (diazepam)]
3. Mood Stabilizer [i.e., Depakote (valproic acid), Lithobid (lithium carbonate)]
4. Stimulant [i.e., Ritalin (methylphenidate), Adderall (amphetamine)]
5. Non-stimulant ADHD medication (i.e., Strattera (atomoxetine)]
6. Other (Specify)
7. Prefer not to say

11. Is the co-parent currently receiving psychotherapy for a psychiatric disorder?
    1. Yes
    2. No
    3. Prefer not to say

    If Yes, please indicate which type(s) of treatment the co-parent is receiving:

    1. Individual therapy
    2. Group therapy
    3. Family therapy
    4. Self help groups (e.g., Alcoholics Anonymous)
    5. Other (Specify)
    6. Prefer not to say
12. Approximate total yearly family income (before taxes)
    1. $_____
    2. Prefer not to say

Appendix B

Treatment History and Update Forms

Child Psychiatric and Treatment History Form

1. How old was your child when it was first noticed that your child had symptoms of selective mutism?: _____ [If Not Applicable, please indicate N/A]

2. How old was your child when it was first noticed that your child had symptoms of social anxiety disorder? _____ [If Not Applicable, please indicate N/A]

3. Has your child ever been diagnosed with or suspected of having an autism spectrum disorder or a pervasive developmental disorder?
    1. Yes
    2. No

4. Has your child been diagnosed with any psychiatric, emotional, or behavioral disorder?
    1. Yes
    2. No

    If *Yes*, what diagnosis, by whom, and when:

    Disorder: _____
    Provider: _____
    Date (Month/Year): _____

    Disorder: _____
    Provider: _____
    Date (Month/Year): _____

    Disorder: _____
    Provider: _____
    Date (Month/Year): _____

5. Does your child currently take any psychiatric medications?
    1. Yes
    2. No

    If *Yes*, please specify:

    Medication: _____
    Dose: _____ Times per day: _____
    Reason: _____

    Medication: _____
    Dose: _____ Times per day: _____
    Reason: _____

    Medication:

Dose: _____ Times per day: _____
Reason: _____

6. Has your child previously taken psychiatric medications other than ones previously specified?
    1. Yes
    2. No

    If *Yes*, please specify:

    Medication: _____
    Dose: _____ Times per day: _____
    Reason: _____
    Dates (Month/Year): Start _____ End_____

    Medication: _____
    Dose: _____ Times per day: _____
    Reason: _____
    Dates (Month/Year): Start _____ End_____

    Medication: _____
    Dose: _____ Times per day: _____
    Reason: _____
    Dates (Month/Year): Start _____ End_____

7. Is your child currently receiving therapy, not including SM group therapy at Alvord Baker?
    1. Yes
    2. No

    If Yes, please continue to Item 5. If no, please skip to Item 6.

8. Please detail the therapy that your child is currently receiving.
    1. Format: Individual, Group, Family, Other (Specify)
    2. Setting: Private Practice, School, Online, Hospital Out-Patient, Hospital In-Patient, Community Mental Health Center, Other (Specify)
    3. Provider: Psychologist, Social Worker, Marriage and Family Therapist, Counselor, Teacher, Psychiatrist, Medical Physician, Other (Specify)
    4. Type: Exposure-based Cognitive Behavioral Therapy, Cognitive Behavioral Therapy, Parent Training, Social Skills Training, Supportive Therapy, Other (Specify)
    5. Reason for seeking treatment:
    6. Dates:

9. Has your child previously received therapy services?
    1. Yes

2. No

If Yes, please continue to Item 7.

10. Please detail the therapy that your child has previously received.
    1. Format: Individual, Group, Family, Other (Specify)
    2. Setting: Private Practice, School, Online, Hospital Out-Patient, Hospital In-Patient, Community Mental Health Center, Other (Specify)
    3. Provider: Psychologist, Social Worker, Marriage and Family Therapist, Counselor, Teacher, Psychiatrist, Medical Physician, Other (Specify)
    4. Type: Exposure-based Cognitive Behavioral Therapy, Cognitive Behavioral Therapy, Parent Training, Social Skills Training, Supportive Therapy, Other (Specify)
    5. Reason for seeking treatment:
    6. Dates:

Post-assessment

1. Since the SM group therapy at Alvord Baker, have any in-school generalization sessions (fade-ins) been conducted for your child?
    1. Yes
    2. No

    If Yes, please specify the dates the sessions occurred and the provider.

    Session date:
    Provider: Alvord Baker SM Clinician, Alvord Baker SM Counselor, Outside Treatment Provider

    Session date:
    Provider: Alvord Baker SM Clinician, Alvord Baker SM Counselor, Outside Treatment Provider

    Session date:
    Provider: Alvord Baker SM Clinician, Alvord Baker SM Counselor, Outside Treatment Provider

2. Since the end of the SM group therapy at Alvord Baker, has your child received any therapy services?
    1. Yes
    2. No

    If Yes, please continue to item 2. If no, please skip to item 3.

2. Please detail the therapy that your child has received since the end of the camp week.
    1. Format: Individual, Group, Family, Other (Specify)
    2. Setting: Private Practice, School, Online, Hospital Out-Patient, Hospital In-Patient, Community Mental Health Center, Other (Specify)
    3. Provider: Psychologist, Social Worker, Marriage and Family Therapist, Counselor, Teacher, Psychiatrist, Medical Physician, Other (Specify)
    4. Type: Exposure-based Cognitive Behavioral Therapy, Cognitive Behavioral Therapy, Parent Training, Social Skills Training, Supportive Therapy Other (Specify)
    5. Reason for seeking treatment:
    6. Dates:

3. Since the end of the SM group therapy at Alvord Baker, has your child started or stopped taking any psychiatric medications?
    1. Yes

2. No

If yes, please detail changes in your child's psychiatric medication schedule.

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

3-month Follow-up Assessment

1. Since the post-assessment at the end of the SM group therapy at Alvord Baker, has your child received any therapy services?
    1. Yes
    2. No

    If Yes, please continue to item 2. If no, please skip to item 3.

2. Please detail the therapy that your child has received since the post-assessment.
    1. Format: Individual, Group, Family, Other (Specify)
    2. Setting: Private Practice, School, Online, Hospital Out-Patient, Hospital In-Patient, Community Mental Health Center, Other (Specify)
    3. Provider: Psychologist, Social Worker, Marriage and Family Therapist, Counselor, Teacher, Psychiatrist, Medical Physician, Other (Specify)
    4. Type: Exposure-based Cognitive Behavioral Therapy, Cognitive Behavioral Therapy, Parent Training, Social Skills Training, Supportive Therapy, Other (Specify)
    5. Reason for seeking treatment:
    6. Dates:

3. Since the post-assessment at the end of the SM group therapy at Alvord Baker, has your child started or stopped taking any psychiatric medications?
    1. Yes
    2. No

If yes, please detail changes in your child's psychiatric medication schedule.

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

Medication: _____
(New) Dose: _____ Times per day: _____
Reason for taking: _____
Dates (Month/Year): Start _____ End (if applicable)_____

Appendix C

ADIS

SM Treatment Study
ADIS Social Phobia and SM Modules- Parent Interview

ID Number					
Date of Interview					
Assessment	Pre: ____ 6-Wk FU: ____				
Interviewer					
Informant	Mom ____ Dad ____ Other ____ (Specify:)				
Disorder	**Age of Onset**	**Meets Current Diagnostic Criteria**		**Parent Interference Rating**	**Clinician Severity Rating**
		Yes	No		
Social Phobia					
Selective Mutism					
CGI current severity: 0 = Not assessed 1 = Normal, not mentally ill 2 = Borderline mentally ill 3 = Mildly ill 4 = Moderately ill 5 = Markedly ill 6 = Severely ill 7 = Extremely ill			**CGI-I (FU only):** 1 = Very much improved 2 = Much improved 3 = Minimally improved 4 = No change 5 = Minimally worse 6 = Much worse 7 = Very much worse		
Notes:					

Intro and Explanation for Feelings/Impairment Thermometers

"Throughout the interview, I will be asking you about how [child] behaves in various social situations. I will also be asking you to rate the level of fear [child] may experience when in those situations. For this type of question we will use the blue feelings thermometer. On the blue feelings thermometer a 0 (point to the 0) means you're cool as a cucumber and it's like you're on the beach with nothing to worry about. And an 8 (point to the 8) is the most fear someone could ever experience. It would be the same amount of fear someone would experience if they were pushed out of a plane unexpectedly. That's an 8. Do you have any questions about the blue feelings thermometer?"

"At the end of each section I'll also ask you to explain how much you think your child's feelings of fear or anxiety disrupt or impair things for him/her in their life overall. For this type of question we will use the green impairment thermometer. You can give any number from 0-8 and the anchors will be: a 0 means that symptoms, thoughts, feelings, behaviors are not messing anything up. A 4 (point to the 4) is at the point in which someone's fear is getting in the way of things for them or their family members and that person or their family members aren't doing the things they want do so, like not having the social relationships they want or not attending events (like soccer games or dance class) out of fear. This is at the point where you might seek out some help or extra support, for example from your child's pediatrician or teacher. An 8 would be when a child's symptoms/thoughts/feelings/behaviors are so impairing in ALL areas of life that a much higher level of care, even hospitalization would be necessary. You might give a 0-3 (point to this range) for situations where [child] shows some distress but is still able to participate and do activities despite their fear (like they can still talk to the teacher, do show and tell and play with the other kids even though they are anxious and take time to warm up). You might give a 5-8 (point to this range) when [child] is so anxious in social situations that it's difficult to go to the park or parties because they hang back with the you or [co-parent] the whole time and won't engage; or [child] won't go to group lessons (dance, soccer), or you're opting out of peer settings that might cause [child] anxiety (soccer, gymnastics). Do you have any questions about the scale?"

If parent does not understand, you can give an additional example of impairment:

"Think of a child with a very intense fear of dogs – a parent might give a lower impairment rating (say a 1-3) if the child can still go out of the house in the neighborhood, take walks, or still go to a friend's house where there is a dog. A parent might give a "4" for impairment if their child's fear of dogs keeps them from walking in their neighborhood, or makingfriends with anyone with a dog, or keeps them from trying activities that involve animals or where there could be a dog (i.e., visiting the zoo or a farm). A person might give a much higher impairment rating (say a 5-8) if they couldn't walk outside or leave their home because they might encounter a dog or if they would not let their parent leave their side because their might be a dog. Any more questions about this scale?"

PRE-Ax Current: 6 months
FU-Ax: ask about past 6 weeks, or since the group ended

SOCIAL PHOBIA (SOCIAL ANXIETY DISORDER)

Initial Inquiry

Becoming scared or anxious around other people, such as when you're the center of attention or meeting someone for the first time, happens to many people. For some kids, this type of nervousness or anxiety is so very uncomfortable that they may blush, sweat, or shake, and they'd really rather avoid these situations. They are much more afraid of social and evaluation situations than are other kids their age.

1a. When your child is in certain social situations such as school, restaurants, parties, or when meeting new people, has (he or she) told you, or have you noticed, that (he or she) is overly worried about what other people think of (him or her)?
□ Yes □ No □Other

If "Yes," Tell me about that.

1b. When (he or she) is in these situations with other people, do you know whether (child's name) worries that (he or she) might do something that will be embarrassing that would make others laugh at, reject or avoid (him or her)?
□ Yes □ No □Other

If "Yes," Tell me about that.

Fear (Yes or No)

2a. Some children get very nervous in situations involving other people. I am going to describe some situations (see list following Question 2c) and ask you how you think (child's name) feels in each situation. First, just tell me "yes" or "no" if your child is more fearful or anxious of the situation than other children his/her age.

Note. Those situations more common to older children and adolescents are grouped at the end of the list. Also, although it is recommended to proceed with this inquiry, if the parent responded "No" to Questions la and lb, the interviewer may use discretion in inquiring about the situations listed.

Fear Ratings (0-8)

2b. For each situation to which the parent responded "Yes," find out how much fear exists using the Feelings Thermometer. Explain the scale again to the parent, if necessary.

Now, using the Feelings Thermometer, how fearful is your child of (specific situation)?

Avoidance/Distress (0-8)

2c. For each situation with a fear rating, inquire about avoidance.

How hard does your child try to avoid this situation? Or, if (he or she) **cannot avoid the situation** (e.g., taking a test, oral report), **does** (he or she) **become upset aboutthe situation? For example, does** (he or she) **seem distracted, report feeling "butterflies," sweat, or experience some other feelings of anxiety?**

****Get observed, behavioral examples of each feared situation****

Performance Situations	Fear		Fear Rating	Avoidance/ Distress Rating	
	Yes	No	0-8	0-8	0-8
Raising hand to answer a question in class					
Being called on by the teacher in class					
Speaking or reading aloud in front of the class					
Asking the teacher a question or for help					
Show & Tell (or a presentation)					
Showing schoolwork to others					
Working on a project with a group of kids/peers					
Gym class/art class/music class					

Musical or athletic performances					
Social Interaction Situations	**Fear**		**Fear Rating**	**Avoidance/ Distress Rating**	
	Yes	**No**	**0-8**	**0-8**	**0-8**
Walking in the hallways or hanging out by (his/her) cubby or locker					
Starting a conversation with someone					
Joining a conversation with others					
Using school or public bathrooms					
Calling a classmate					
Eating in front of others (e.g., home, school cafeteria, restaurants)					
Meetings such as girl or boy scouts or team meetings					
Playing with a group of kids					
Answering or talking on the telephone					
Inviting a friend to get together					
Speaking to adults (e.g., store clerk, waiters, principal)					
Attending parties or school activity nights					

Can you tell me about the most recent party/event your child attended?:					
Having a photo or video taken (e.g., for yearbook, Instagram)					
Attending a camp (due to social anx., NOT separation anx.)					
Saying no to something (he or she) doesn't want to do					
Telling someone to stop doing something that bothers (him/her)					

What does your child do when you take him/her to the playground? Can you think of the last time you took him/her to the playground and describe it for me?

Can you think of the most recent playdate your child had and describe it for me?

Are there any other times when being around people makes your child nervous or scared?
□ Yes □ No □ Other

If yes, "Tell me about that."

If one or more situations are rated 4 or greater and are endorsed as either avoided or endured with distress, place a check mark in the diamond.

CRITERION

Note that for children, the anxiety must occur in peer situations and not just when interacting with adults.

If the parent responded "No" to Questions 1a-1b and reports no fear or avoidance in any situation in Question 2, skip to next module, otherwise continue.

(scared, frightened) **in these situations. When your child** (list several situations identified by the child)**, do you know if** (he or she)**:**

a. **shakes, sweats, or feel panicky?**	**Yes or No**
b. **cries?**	**Yes or No**
c. **gets angry or mad, and has a tantrum?**	**Yes or No**
d. **feels as though he or she can't move or speak?**	**Yes or No**
e. **stays very close and clings to you or to someone else?**	**Yes or No**
f. **tries to hide and avoid the situation or people?**	**Yes or No**
g. **avoids or stops speaking in front of others?**	**Yes or No**

In children, social anxiety may be expressed by one of the above responses.

4. **Would you say that** (he or she) **has been nervous or anxious in these situations for at least six months?**

□ **Yes** □ **No** □ **Other**

If fear or anxiety in social situations has lasted for at least six months, place a check mark in the diamond.

INTERFERENCE

Now, I want to find out how much you feel this problem interferes with your child's life. That is, how much has it interfered with your child's friendships, caused problems at school or at home, or stopped your child from doing the things (he or she) would like to do?

I would like you to rate how much you think this problem interferes in your child's life using a scale that goes from 0 to 8. A 0 means that symptoms, thoughts, feelings, and behaviors related to difficulties speaking in public are not messing anything up for your child. A 4 is the point at which difficulties speaking in public are getting in the way of things so much so that you might seek out some help or extra support, for example from a pediatrician, therapist, or teacher. An 8 would be when a child's symptoms, thoughts, feelings, and behaviors are so impairing in ALL areas of life that a very high level of care, such as hospitalization, would be necessary.

If you could rate the degree of interference from 0 to 8, where 0 is *Not At All*, a 4 is *Some* (where you might seek out extra help), and an 8 is *Very, Very Much*, what would you say?

Parent CSR: _____

When did these symptoms begin? _____

UMD CSR: _____

If CSR ≥ 4, Criterion = YES | **CRITERION MET: □ Yes □ No**

PRE-Ax Current: 1 month (not limited to the first month of school)
FU-Ax: ask about past 6 weeks, or since the group ended

SELECTIVE MUTISM

Initial Inquiry

Some children have no difficulty talking, laughing, and even singing in front of family members, but in public situations, such as school, they are unable to speak aloud in front of other people.

1. **In the past month, does (child's name) refuse to speak at school or in other social situations? For example, does (he or she) refuse to answer questions in school or refuse to respond when persons other than family members speak to (him or her)? □ Yes □ No**

2. **Does (he or she) refuse to answer friends and other people who ask (him or her) questions? □ Yes □ No**

If YES to Questions 1 and 2, Criterion = YES | **CRITERION MET: □ Yes □ No**

3. **Does (he or she) talk when (he or she) is at home with the rest of the family? □ Yes □ No**

4. **Does (he or she) have any friends who speak for (him or her) when (he or she) needs something at school? Or do family members speak for (him or her) in situations such as ordering food, talking on the phone, and so forth? □ Yes □ No**

5. **Has school become difficult because of (his or her) not talking? □ Yes □ No**

6. **Do you get upset because (child's name) won't speak to other people? □ Yes □ No**

7. **Has (he or she) ever spoken in school or outside of home? □ Yes □ No**

8. **Has this been going on for longer than the first month of school? □ Yes □ No**

If YES to Question 8, Criterion = YES | **CRITERION MET: □ Yes □ No**

INTERFERENCE

Now, I want to find out how much you feel this problem interferes with your child's life. That is, how much has it interfered with your child's friendships, caused problems at school or at home, or stopped your child from doing the things (he or she) would like to do?

I would like you to rate how much you think this problem interferes in your child's life using a scale that goes from 0 to 8. A 0 means that symptoms, thoughts, feelings, and behaviors related to difficulties speaking in public are not messing anything up for your child. A 4 is the point at which difficulties speaking in public are getting in the way of things so much so that you might seek out some help or extra support, for example from a pediatrician, therapist, or teacher. An 8 would be when a child's symptoms, thoughts, feelings, and behaviors are so impairing in ALL areas of life that a very high level of care, such as hospitalization, would be necessary.

If you could rate the degree of interference from 0 to 8, where 0 is *Not At All*, a 4 is *Some* (where you might seek out extra help), and an 8 is *Very, Very Much*, what would you say?

Parent CSR: _____

When did these symptoms begin? _____

UMD CSR: _____

If CSR ≥ 4, Criterion = YES | **CRITERION MET: □ Yes □ No**

[OPTIONAL] Additional SM Probes

1. **Are there people your child does not talk to on a consistent basis? Who?**

2. **Are there places your child will not talk on a consistent basis? Where?**

3. **Are there certain activities your child will not do because they require talking? Which activities?**

4. **Does your child begin to speak after a "warm up" time? Or does (he or she) consistently not talk to certain people or in certain situations?**

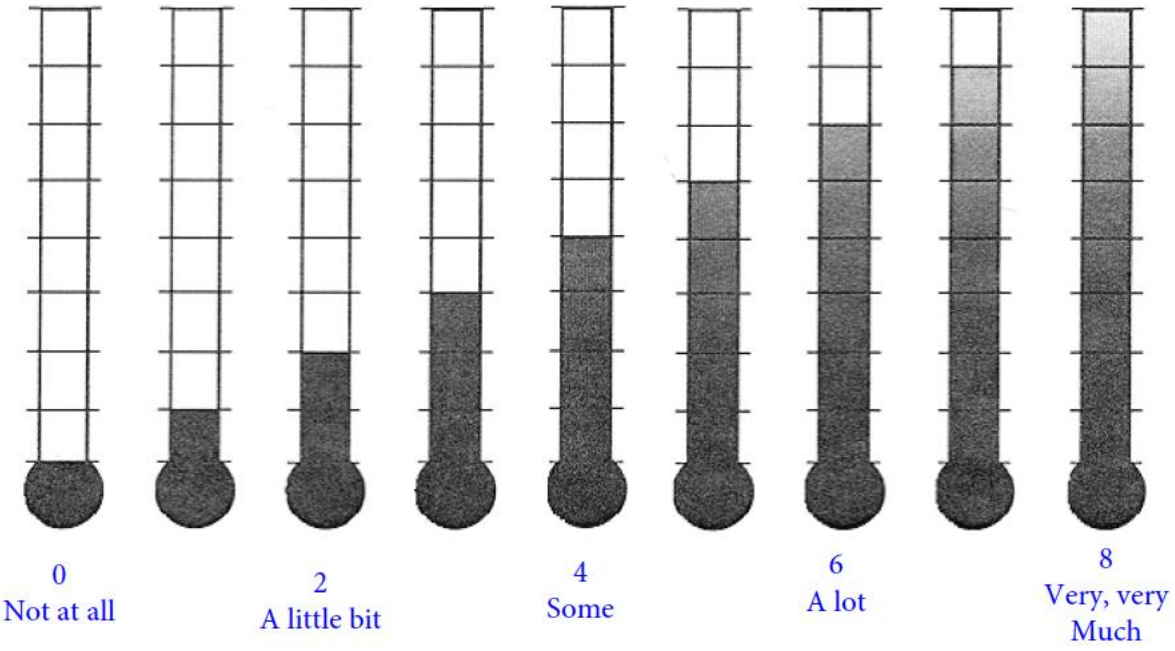
5. **Would others be surprised to hear your child speak?**

6. **Does your child vary (his or her) speech to you in different contexts (e.g., does s/he stop speaking to you if s/he knows others can hear her/him in a certain setting)?**

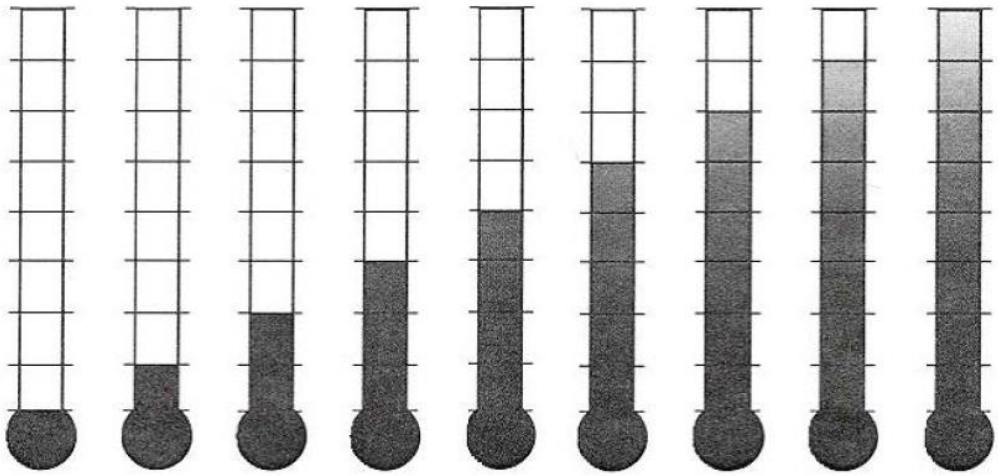
Frequency
- **How often the child is speaking vs. not speaking to these people or in these places**
- **Specific examples and percentages of time that failure to speak happens**

Familiarity
- **How often does the child see the people to whom they are not speaking**
- **How often does the child go to the places where they are not speaking**

FEELINGS THERMOMETER



IMPAIRMENT THERMOMETER



0
No Impairment

2

4
Definite problem that is impairing enough to seek help or treatment

6

8
Most impairing in all areas of life. Some instances could require hospitalization

Appendix D

SMQ

Selective Mutism Questionnaire (SMQ)©

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

AT SCHOOL

1. When appropriate, my child talks to most peers at school.
   ○ Always ○ Often ○ Seldom ○ Never

2. When appropriate, my child talks to selected peers (his/her friends) at school.
   ○ Always ○ Often ○ Seldom ○ Never

3. When my child is asked a question by his/her teacher, s/he answers.
   ○ Always ○ Often ○ Seldom ○ Never

4. When appropriate, my child asks his or her teacher questions.
   ○ Always ○ Often ○ Seldom ○ Never

5. When appropriate, my child speaks to most teachers or staff at school.
   ○ Always ○ Often ○ Seldom ○ Never

6. When appropriate, my child speaks in groups or in front of the class.
   ○ Always ○ Often ○ Seldom ○ Never

HOME/FAMILY

7. When appropriate, my child talks to family members living at home when other people are present.
   ○ Always ○ Often ○ Seldom ○ Never

8. When appropriate, my child talks to family members while in unfamiliar places.
   ○ Always ○ Often ○ Seldom ○ Never

9. When appropriate, my child talks to family members that don't live with him/her (e.g., grandparent, cousin).
   ○ Always ○ Often ○ Seldom ○ Never

10. When appropriate, my child talks on the phone to his/her parents and siblings.

◯ Always ◯ Often ◯ Seldom ◯ Never

11. When appropriate, my child speaks with family friends who are well-known to him/her.

◯ Always ◯ Often ◯ Seldom ◯ Never

12. My child speaks to at least one babysitter.

◯ Always ◯ Often ◯ Seldom ◯ Never N/A

IN SOCIAL SITUATIONS (OUTSIDE OF SCHOOL)

13. When appropriate, my child speaks with other children who s/he doesn't know.

◯ Always ◯ Often ◯ Seldom ◯ Never

14. When appropriate, my child speaks with family friends who s/he doesn't know.

◯ Always ◯ Often ◯ Seldom ◯ Never

15. When appropriate, my child speaks with his or her doctor and/or dentist.

◯ Always ◯ Often ◯ Seldom ◯ Never

16. When appropriate, my child speaks to store clerks and/or waiters.

◯ Always ◯ Often ◯ Seldom ◯ Never

17. When appropriate, my child talks when in clubs, teams, or organized activities outside of school.

◯ Always ◯ Often ◯ Seldom ◯ Never N/A

Interference/Distress*

18. How much does not talking interfere with school for your child?

◯ Not at all ◯ Slightly ◯ Moderately ◯ Extremely

19. How much does not talking interfere with family relationships?

◯ Not at all ◯ Slightly ◯ Moderately ◯ Extremely

20. How much does not talking interfere in social situations for your child?

◯ Not at all ◯ Slightly ◯ Moderately ◯ Extremely

21. Overall, how much does not talking interfere with life for your child?

◯ Not at all ◯ Slightly ◯ Moderately ◯ Extremely

22. Overall, how much does not talking bother your child?

○ Not at all ○ Slightly ○ Moderately ○ Extremely

23. Overall, how much does your child's not talking bother you?

○ Not at all ○ Slightly ○ Moderately ○ Extremely

Scoring: Always = 3; Often = 2; Seldom = 1; Never = 0

Appendix E

SSQ

School Speech Questionnaire*

Name of Teacher Who Completed This Questionnaire:

When responding to the following items, please consider the behavior of your student, _____, and activities of the past month and rate how often each statement is true.

1. When appropriate, this student talks to most peers at school.
   Always Often Seldom Never

2. When appropriate, this student talks to selected peers (his/her friends) at school.
   Always Often Seldom Never

3. When called on by his/her teacher, this student answers verbally.
   Always Often Seldom Never

4. When appropriate, this student asks you (the teacher) questions.
   Always Often Seldom Never

5. When appropriate, this student speaks to most teachers or staff at school.
   Always Often Seldom Never

6. When appropriate, this student speaks in groups or in front of the class.
   Always Often Seldom Never

*7. When appropriate, this student participates nonverbally in class (i.e., points, gestures, writes notes).
   Always Often Seldom Never

*8. How much does not talking interfere with school for this student?
   Not at all Slightly Moderately Extremely

Scoring: Always = 3, Often = 2, Seldom = 1, Never = 0

* These items are not included in total score.

Appendix F

SAS

PRESCHOOL ANXIETY SCALE
(Parent Report)

Your Name: _____ **Date:** _____

Your Child's Name: _____

Below is a list of items that describe children. For each item please circle the response that best describes your child. Please circle the **4** if the item is **very often true, 3** if the item is **quite often true, 2** if the item is **sometimes true, 1** if the item is **seldom true** or if it is **not true at all** circle the **0**. Please answer all the items as well as you can, even if some do not seem to apply to your child.

		Not True at All	Seldom True	Sometimes True	Quite Often True	Very Often True
1	Has difficulty stopping him/herself from worrying.....	0	1	2	3	4
2	Worries that he/she will do something to look stupid in front of other people.....	0	1	2	3	4
3	Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap).....	0	1	2	3	4
4	Is tense, restless or irritable due to worrying.....	0	1	2	3	4
5	Is scared to ask an adult for help (e.g., a preschool or school teacher).....	0	1	2	3	4
6	Is reluctant to go to sleep without you or to sleep away from home.....	0	1	2	3	4
7	Is scared of heights (high places).....	0	1	2	3	4
8	Has trouble sleeping due to worrying.....	0	1	2	3	4
9	Washes his/her hands over and over many times each day.....	0	1	2	3	4
10	Is afraid of crowded or closed-in places.....	0	1	2	3	4
11	Is afraid of meeting or talking to unfamiliar people.....	0	1	2	3	4
12	Worries that something bad will happen to his/her parents.....	0	1	2	3	4
13	Is scared of thunder storms.....	0	1	2	3	4
14	Spends a large part of each day worrying about various things.....	0	1	2	3	4
15	Is afraid of talking in front of the class (preschool group) e.g., show and tell.....	0	1	2	3	4
16	Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again.....	0	1	2	3	4
17	Is nervous of going swimming.....	0	1	2	3	4

		Not True at All	Seldom True	Sometimes True	Quite Often True	Very Often True
18	Has to have things in exactly the right order or position to stop bad things from happening	0	1	2	3	4
19	Worries that he/she will do something embarrassing in front of other people	0	1	2	3	4
20	Is afraid of insects and/or spiders	0	1	2	3	4
21	Has bad or silly thoughts or images that keep coming back over and over	0	1	2	3	4
22	Becomes distressed about your leaving him/her at preschool/school or with a babysitter	0	1	2	3	4
23	Is afraid to go up to group of children and join their activities	0	1	2	3	4
24	Is frightened of dogs	0	1	2	3	4
25	Has nightmares about being apart from you	0	1	2	3	4
26	Is afraid of the dark	0	1	2	3	4
27	Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening	0	1	2	3	4
28	Asks for reassurance when it doesn't seem necessary	0	1	2	3	4
29	Has **your child ever experienced anything really bad or traumatic** (e.g., severe accident, death of a family member/friend, assault, robbery, disaster)	**YES**	**NO**			

Please briefly describe the event that your child experienced.....

_____

_____

_____

_____

_____

If you answered **NO** to **question 29,** please **do not** answer questions 30-34**. If you answered YES, please DO** answer the following questions.

Do the following statements describe your child's behaviour since the event?

30	Has bad dreams or nightmares about the event	0	1	2	3	4
31	Remembers the event and becomes distressed	0	1	2	3	4
32	Becomes distressed when reminded of the event	0	1	2	3	4
33	Suddenly behaves as if he/she is reliving the bad experience	0	1	2	3	4
34	Shows bodily signs of fear (e.g., sweating, shaking or racing heart) when reminded of the event	0	1	2	3	4

SPENCE CHILDREN'S ANXIETY SCALE
(Parent Report)

Your Name: _____ **Date:** _____

Your Child's Name: _____

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.

1.	My child worries about things.....	Never	Sometimes	Often	Always
2.	My child is scared of the dark.....	Never	Sometimes	Often	Always
3.	When my child has a problem, s(he) complains of having a funny feeling in his / her stomach	Never	Sometimes	Often	Always
4.	My child complains of feeling afraid.....	Never	Sometimes	Often	Always
5.	My child would feel afraid of being on his/her own at home.....	Never	Sometimes	Often	Always
6.	My child is scared when s(he) has to take a test.....	Never	Sometimes	Often	Always
7.	My child is afraid when (s)he has to use public toilets or bathrooms.....	Never	Sometimes	Often	Always
8.	My child worries about being away from us / me.....	Never	Sometimes	Often	Always
9.	My child feels afraid that (s)he will make a fool of him/herself in front of people.....	Never	Sometimes	Often	Always
10.	My child worries that (s)he will do badly at school.....	Never	Sometimes	Often	Always
11.	My child worries that something awful will happen to someone in our family.....	Never	Sometimes	Often	Always
12.	My child complains of suddenly feeling as if (s)he can't breathe when there is no reason for this.....	Never	Sometimes	Often	Always
13.	My child has to keep checking that (s)he has done things right (like the switch is off, or the door is locked)..	Never	Sometimes	Often	Always
14.	My child is scared if (s)he has to sleep on his/her own.....	Never	Sometimes	Often	Always
15.	My child has trouble going to school in the mornings because (s)he feels nervous or afraid.....	Never	Sometimes	Often	Always
16.	My child is scared of dogs	Never	Sometimes	Often	Always
17.	My child can't seem to get bad or silly thoughts out of his / her head.....	Never	Sometimes	Often	Always
18.	When my child has a problem, s(he) complains of his/her heart beating really fast.....	Never	Sometimes	Often	Always

19.	My child suddenly starts to tremble or shake when there is no reason for this	Never	Sometimes	Often	Always
20.	My child worries that something bad will happen to him/her	Never	Sometimes	Often	Always
21.	My child is scared of going to the doctor or dentist	Never	Sometimes	Often	Always
22.	When my child has a problem, (s)he feels shaky	Never	Sometimes	Often	Always
23.	My child is scared of heights (eg. being at the top of a cliff)	Never	Sometimes	Often	Always
24.	My child has to think special thoughts (like numbers or words) to stop bad things from happening	Never	Sometimes	Often	Always
25.	My child feels scared if (s)he has to travel in the car, or on a bus or train	Never	Sometimes	Often	Always
26.	My child worries what other people think of him/her	Never	Sometimes	Often	Always
27.	My child is afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)	Never	Sometimes	Often	Always
28	All of a sudden my child feels really scared for no reason at all	Never	Sometimes	Often	Always
29.	My child is scared of insects or spiders	Never	Sometimes	Often	Always
30.	My child complains of suddenly becoming dizzy or faint when there is no reason for this	Never	Sometimes	Often	Always
31.	My child feels afraid when (s)he has to talk in front of the class	Never	Sometimes	Often	Always
32.	My child's complains of his / her heart suddenly starting to beat too quickly for no reason	Never	Sometimes	Often	Always
33.	My child worries that (s)he will suddenly get a scared feeling when there is nothing to be afraid of	Never	Sometimes	Often	Always
34.	My child is afraid of being in small closed places, like tunnels or small rooms	Never	Sometimes	Often	Always
35.	My child has to do some things over and over again (like washing his / her hands, cleaning or putting things in a certain order)	Never	Sometimes	Often	Always
36.	My child gets bothered by bad or silly thoughts or pictures in his/her head	Never	Sometimes	Often	Always
37.	My child has to do certain things in just the right way to stop bad things from happening	Never	Sometimes	Often	Always
38.	My child would feel scared if (s)he had to stay away from home overnight	Never	Sometimes	Often	Always
39.	Is there anything else that your child is really afraid of?	YES	NO		
	Please write down what it is, and fill out how often (s)he is afraid of this thing: _____	Never	Sometimes	Often	Always
	_____	Never	Sometimes	Often	Always

Appendix G

BASC-3

Child's Name _____ (First, Middle, Last)

Date _____ (Month, Day, Year) Birth Date _____ (Month, Day, Year)

School _____ Grade _____

Child's Gender ☐ Male ☐ Female Age _____

Your Name _____ (First, MI, Last)

Your Gender ☐ Male ☐ Female

Your Relationship to Child ☐ Mother ☐ Father ☐ Guardian ☐ Other _____

Do you have concerns about this child's:

(a) Vision? Y N _____

(b) Hearing? Y N _____

(c) Eating habits? Y N _____

Instructions

This form contains phrases that describe how children may act. Please read each phrase and select the response that describes how this child has behaved recently (in the last several months).

Select **N** if the behavior **never** occurs.

Select **S** if the behavior **sometimes** occurs.

Select **O** if the behavior **often** occurs.

Select **A** if the behavior **almost always** occurs.

Please mark every item. If you don't know or are unsure of your response to an item, give your best estimate. A "Never" response does not mean that the child "never" engages in a behavior, only that you have no knowledge of it occurring.

How to Mark Your Responses

Be certain to circle completely the letter you choose:

N S (O) A

If you wish to change a response, mark an X through it and circle your new choice, like this:

N (S) ~~O~~ A

Before starting, be sure to complete the information above these instructions.

Remember: N = Never S = Sometimes O = Often A = Almost always

1. Is easy to please	N	S	O	A
2. Begins conversations appropriately	N	S	O	A
3. Is in constant motion	N	S	O	A
4. Says, "please" and "thank you."	N	S	O	A
5. Is a picky eater	N	S	O	A
6. Gets sick	N	S	O	A
7. Will seek help when he or she needs it	N	S	O	A
8. Adjusts well to changes in family plans	N	S	O	A
9. Breaks other children's things	N	S	O	A
10. Is easily stressed	N	S	O	A
11. Congratulates others when good things happen to them	N	S	O	A
12. Provides full name when asked	N	S	O	A
13. Interrupts parents when they are talking on the phone	N	S	O	A
14. Is sad	N	S	O	A
15. Needs help putting on clothes	N	S	O	A
16. Pays attention	N	S	O	A
17. Adjusts well to changes in routine	N	S	O	A
18. Complains about health	N	S	O	A
19. Shows fear of strangers	N	S	O	A
20. Disrupts the play of other children	N	S	O	A
21. Worries about what parents think	N	S	O	A
22. Offers help to other children	N	S	O	A
23. Whines	N	S	O	A
24. Vomits	N	S	O	A
25. Acts without thinking	N	S	O	A
26. Worries about things that cannot be changed	N	S	O	A
27. Loses control when angry	N	S	O	A
28. Has a short attention span	N	S	O	A
29. Engages in repetitive movements	N	S	O	A
30. Is easily upset	N	S	O	A
31. Isolates self from others	N	S	O	A
32. Shares toys or possessions with other children	N	S	O	A
33. Needs help tying shoes	N	S	O	A
34. Seems odd	N	S	O	A
35. Changes moods quickly	N	S	O	A
36. Cannot wait to take turn	N	S	O	A
37. Worries about parents	N	S	O	A
38. Listens to directions	N	S	O	A
39. Needs help using zippers	N	S	O	A
40. Is shy with other children	N	S	O	A
41. Seems unaware of others	N	S	O	A
42. Is easily calmed when angry	N	S	O	A
43. Teases others	N	S	O	A
44. Eats things that are not food	N	S	O	A
45. Needs help bathing self	N	S	O	A
46. Worries about what other children think	N	S	O	A
47. Has trouble eating with a fork	N	S	O	A
48. Gets colds	N	S	O	A
49. Is mean	N	S	O	A
50. Avoids eye contact	N	S	O	A
51. Answers telephone properly	N	S	O	A
52. Is easily frustrated	N	S	O	A
53. Politely asks for help	N	S	O	A
54. Has trouble fastening buttons on clothing	N	S	O	A
55. Is cruel to animals	N	S	O	A
56. Has sore throats	N	S	O	A
57. Needs to be reminded to brush teeth	N	S	O	A
58. Bangs head	N	S	O	A
59. Pays attention when being spoken to	N	S	O	A
60. Tries to be perfect	N	S	O	A
61. Falls down or trips over things easily	N	S	O	A
62. Tries new things	N	S	O	A
63. Threatens to hurt others	N	S	O	A
64. Provides home address when asked	N	S	O	A
65. Sleeps with parents	N	S	O	A
66. Communicates clearly	N	S	O	A
67. Compliments others	N	S	O	A
68. Has headaches	N	S	O	A
69. Reacts negatively	N	S	O	A
70. Wets bed	N	S	O	A
71. Holds a grudge	N	S	O	A
72. Pouts	N	S	O	A
73. Responds appropriately when asked a question	N	S	O	A
74. Fiddles with things while at meals	N	S	O	A
75. Quickly joins group activities	N	S	O	A
76. Stares blankly	N	S	O	A
77. Sets fires	N	S	O	A
78. Is easily distracted	N	S	O	A
79. Recovers quickly after a setback	N	S	O	A
80. Cries easily	N	S	O	A
81. Is unclear when presenting ideas	N	S	O	A
82. Avoids other children	N	S	O	A
83. Finds ways to solve problems	N	S	O	A
84. Hits other children	N	S	O	A
85. Is overly emotional	N	S	O	A
86. Is shy with adults	N	S	O	A
87. Has fevers	N	S	O	A
88. Adjusts easily to new surroundings	N	S	O	A
89. Avoids exercise or other physical activity	N	S	O	A
90. Is negative about things	N	S	O	A

Remember:	N = Never	S = Sometimes	O = Often	A = Almost always

91.	Has trouble making new friends.	N	S	O	A
92.	Has trouble concentrating.	N	S	O	A
93.	Says, "I'm not very good at this."	N	S	O	A
94.	Does strange things.	N	S	O	A
95.	Starts conversations.	N	S	O	A
96.	Bullies others.	N	S	O	A
97.	Complains of physical problems.	N	S	O	A
98.	Is irritable.	N	S	O	A
99.	Argues when denied own way.	N	S	O	A
100.	Volunteers to help with things.	N	S	O	A
101.	Says things that make no sense.	N	S	O	A
102.	Is overly active.	N	S	O	A
103.	Says all letters of the alphabet when asked.	N	S	O	A
104.	Worries about making mistakes.	N	S	O	A
105.	Says, "Nobody likes me."	N	S	O	A
106.	Misses school or daycare because of sickness.	N	S	O	A
107.	Uses appropriate table manners.	N	S	O	A
108.	Readily starts up conversations with new people.	N	S	O	A
109.	Gets angry easily.	N	S	O	A
110.	Complains of being cold.	N	S	O	A
111.	Has poor self-control.	N	S	O	A
112.	Has toileting accidents.	N	S	O	A
113.	Shows basic emotions clearly.	N	S	O	A
114.	Has seizures.	N	S	O	A
115.	Listens carefully.	N	S	O	A
116.	Adjusts well to new teachers or caregivers.	N	S	O	A
117.	Needs too much supervision.	N	S	O	A
118.	Acts strangely.	N	S	O	A
119.	Is overly aggressive.	N	S	O	A
120.	Is clear when telling about personal experiences.	N	S	O	A
121.	Interrupts others when they are speaking.	N	S	O	A
122.	Complains of pain.	N	S	O	A
123.	Encourages others to do their best.	N	S	O	A
124.	Speaks in short phrases that are hard to understand.	N	S	O	A
125.	Avoids making friends.	N	S	O	A
126.	Makes frequent visits to the doctor.	N	S	O	A
127.	Babbles to self.	N	S	O	A
128.	Worries.	N	S	O	A
129.	Says, "I'm afraid I will make a mistake."	N	S	O	A
130.	Makes friends easily.	N	S	O	A
131.	Shows feelings that do not fit the situation.	N	S	O	A
132.	Complains of stomach pain.	N	S	O	A
133.	Acts out of control.	N	S	O	A
134.	Prefers to play alone.	N	S	O	A
135.	Does weird things.	N	S	O	A
136.	Clings to parent in strange surroundings.	N	S	O	A
137.	Is unable to slow down.	N	S	O	A
138.	Is nervous.	N	S	O	A
139.	Is able to describe feelings accurately.	N	S	O	A

General Comments

What are the behavioral and/or emotional strengths of this child?

Please list any specific behavioral and/or emotional concerns you have about this child.

BASC3

Parent Rating Scales PRS–C

Child Ages 6–11

Cecil R. Reynolds, PhD • Randy W. Kamphaus, PhD

Child's Name _____ (First Middle Last)

Date _____ (Month Day Year) Birth Date _____ (Month Day Year)

School _____ Grade _____

Child's Gender ☐ Male ☐ Female Age _____

Your Name _____ (First MI Last)

Your Gender ☐ Male ☐ Female

Your Relationship to Child ☐ Mother ☐ Father ☐ Guardian ☐ Other _____

Do you have concerns about this child's:

(a) Vision? Y N _____

(b) Hearing? Y N _____

(c) Eating habits? Y N _____

Instructions

This form contains phrases that describe how children may act. Please read each phrase and select the response that describes how this child has behaved recently (in the last several months).

Select **N** if the behavior **never** occurs.

Select **S** if the behavior **sometimes** occurs.

Select **O** if the behavior **often** occurs.

Select **A** if the behavior **almost always** occurs.

Please mark every item. If you don't know or are unsure of your response to an item, give your best estimate. A "Never" response does not mean that the child "never" engages in a behavior, only that you have no knowledge of it occurring.

How to Mark Your Responses

Be certain to circle completely the letter you choose:

N S (O) A

If you wish to change a response, mark an X through it and circle your new choice, like this:

N (S) ⊗ A

Before starting, be sure to complete the information above these instructions.

Remember: N = Never	S = Sometimes	O = Often	A = Almost always

1.	Pays attention.	N	S	O	A	46.	Is careless with belongings.	N	S	O	A
2.	Makes positive comments about others.	N	S	O	A	47.	Adjusts well to changes in family plans.	N	S	O	A
3.	Disobeys.	N	S	O	A	48.	Is shy with other children.	N	S	O	A
4.	Is easily upset.	N	S	O	A	49.	Complains of pain.	N	S	O	A
5.	Responds appropriately when asked a question.	N	S	O	A	50.	Teases others.	N	S	O	A
6.	Gets sick.	N	S	O	A	51.	Eats things that are not food.	N	S	O	A
7.	Gets into trouble.	N	S	O	A	52.	Says, "I want to die" or "I wish I were dead."	N	S	O	A
8.	Has good coping skills.	N	S	O	A	53.	Shows interest in others' ideas.	N	S	O	A
9.	Worries.	N	S	O	A	54.	Worries about what other children think.	N	S	O	A
10.	Avoids eye contact.	N	S	O	A	55.	Hurts others on purpose.	N	S	O	A
11.	Has a short attention span.	N	S	O	A	56.	Tracks down information when needed.	N	S	O	A
12.	Acts confused.	N	S	O	A	57.	Vomits.	N	S	O	A
13.	Is a picky eater.	N	S	O	A	58.	Confuses real with make-believe.	N	S	O	A
14.	Says, "please" and "thank you."	N	S	O	A	59.	Manipulates others.	N	S	O	A
15.	Complains about health.	N	S	O	A	60.	Is sad.	N	S	O	A
16.	Plans well.	N	S	O	A	61.	Answers telephone properly.	N	S	O	A
17.	Seems odd.	N	S	O	A	62.	Is good at getting people to work together.	N	S	O	A
18.	Is a "self-starter."	N	S	O	A	63.	Expresses fear of getting sick.	N	S	O	A
19.	Has toileting accidents.	N	S	O	A	64.	Has trouble fastening buttons on clothing.	N	S	O	A
20.	Says, "I think I'm sick."	N	S	O	A	65.	Is cruel to animals.	N	S	O	A
21.	Is fearful.	N	S	O	A	66.	Needs to be reminded to brush teeth.	N	S	O	A
22.	Makes healthy food choices.	N	S	O	A	67.	Worries about what parents think.	N	S	O	A
23.	Lies.	N	S	O	A	68.	Breaks the rules.	N	S	O	A
24.	Acts without thinking.	N	S	O	A	69.	Has difficulty explaining rules of games to others.	N	S	O	A
25.	Finds fault with everything.	N	S	O	A	70.	Gets angry easily.	N	S	O	A
26.	Loses control when angry.	N	S	O	A	71.	Takes a step-by-step approach to work.	N	S	O	A
27.	Has trouble following regular routines.	N	S	O	A	72.	Falls down or trips over things easily.	N	S	O	A
28.	Listens to directions.	N	S	O	A	73.	Has poor self-control.	N	S	O	A
29.	Is usually chosen as a leader.	N	S	O	A	74.	Breaks the rules just to see what will happen.	N	S	O	A
30.	Engages in repetitive movements.	N	S	O	A	75.	Sleeps with parents.	N	S	O	A
31.	Appears tense.	N	S	O	A	76.	Communicates clearly.	N	S	O	A
32.	Is overly active.	N	S	O	A	77.	Compliments others.	N	S	O	A
33.	Accurately takes down messages.	N	S	O	A	78.	Has headaches.	N	S	O	A
34.	Cries easily.	N	S	O	A	79.	Reacts negatively.	N	S	O	A
35.	Threatens to hurt others.	N	S	O	A	80.	Says, "I don't have any friends."	N	S	O	A
36.	Avoids exercise or other physical activity.	N	S	O	A	81.	Seems out of touch with reality.	N	S	O	A
37.	Sets realistic goals.	N	S	O	A	82.	Wets bed.	N	S	O	A
38.	Worries about things that cannot be changed.	N	S	O	A	83.	Listens carefully.	N	S	O	A
39.	Complains of being sick when nothing is wrong.	N	S	O	A	84.	Is nervous.	N	S	O	A
40.	Changes moods quickly.	N	S	O	A	85.	Has trouble getting information when needed.	N	S	O	A
41.	Throws or breaks things when angry.	N	S	O	A	86.	Accepts things as they are.	N	S	O	A
42.	Interrupts others when they are speaking.	N	S	O	A	87.	Quickly joins group activities.	N	S	O	A
43.	Deceives others.	N	S	O	A	88.	Stares blankly.	N	S	O	A
44.	Overreacts to stressful situations.	N	S	O	A	89.	Sets fires.	N	S	O	A
45.	Says, "I hate myself."	N	S	O	A	90.	Cleans up after self.	N	S	O	A

Remember:	N = Never	S = Sometimes	O = Often	A = Almost always

91.	Is easily distracted.	N S O A	136.	Has panic attacks.	N S O A
92.	Recovers quickly after a setback.	N S O A	137.	Offers help to other children.	N S O A
93.	Fiddles with things while at meals.	N S O A	138.	Is overly emotional.	N S O A
94.	Puts others down.	N S O A	139.	Shows basic emotions clearly.	N S O A
95.	Finds ways to solve problems.	N S O A	140.	Has seizures.	N S O A
96.	Avoids other children.	N S O A	141.	Lies to get out of trouble.	N S O A
97.	Makes others feel welcome.	N S O A	142.	Makes decisions easily.	N S O A
98.	Hits other children.	N S O A	143.	Adjusts well to new teachers.	N S O A
99.	Is in constant motion.	N S O A	144.	Steals.	N S O A
100.	Seems lonely.	N S O A	145.	Does strange things.	N S O A
101.	Is shy with adults.	N S O A	146.	Is overly aggressive.	N S O A
102.	Likes to talk about his or her day.	N S O A	147.	Is easily stressed.	N S O A
103.	Adjusts well to changes in routine.	N S O A	148.	Is clear when telling about personal experiences.	N S O A
104.	Says, "It's all my fault."	N S O A	149.	Organizes chores or other tasks well.	N S O A
105.	Has fevers.	N S O A	150.	Tells lies about others.	N S O A
106.	Gets back at others.	N S O A	151.	Is unable to slow down.	N S O A
107.	Worries about what teachers think.	N S O A	152.	Seems unaware of others.	N S O A
108.	Picks on others who are different from his or her self.	N S O A	153.	Acts in a safe manner.	N S O A
109.	Starts conversations.	N S O A	154.	Encourages others to do their best.	N S O A
110.	Is negative about things.	N S O A	155.	Prefers to be a leader.	N S O A
111.	Has trouble making new friends.	N S O A	156.	Avoids making friends.	N S O A
112.	Says, "I'm not very good at this."	N S O A	157.	Babbles to self.	N S O A
113.	Tries to help others be their best.	N S O A	158.	Speech is confused or disorganized.	N S O A
114.	Disrupts other children's activities.	N S O A	159.	Interrupts parents when they are talking on the phone.	N S O A
115.	Acts strangely.	N S O A	160.	Says, "I'm afraid I will make a mistake."	N S O A
116.	Says, "I can't do anything right."	N S O A	161.	Is afraid of getting sick.	N S O A
117.	Bullies others.	N S O A	162.	Runs away from home.	N S O A
118.	Complains of physical problems.	N S O A	163.	Makes friends easily.	N S O A
119.	Is irritable.	N S O A	164.	Sneaks around.	N S O A
120.	Gives good suggestions for solving problems.	N S O A	165.	Is able to describe feelings accurately.	N S O A
121.	Argues when denied own way.	N S O A	166.	Acts out of control.	N S O A
122.	Says things that make no sense.	N S O A	167.	Shows feelings that do not fit the situation.	N S O A
123.	Overcomes problems.	N S O A	168.	Is unclear when presenting ideas.	N S O A
124.	Says, "I want to kill myself."	N S O A	169.	Is resilient.	N S O A
125.	Acts as if other children are not there.	N S O A	170.	Prefers to play alone.	N S O A
126.	Isolates self from others.	N S O A	171.	Does weird things.	N S O A
127.	Pays attention when being spoken to.	N S O A	172.	Cannot wait to take turn.	N S O A
128.	Worries about making mistakes.	N S O A	173.	Is highly motivated to succeed.	N S O A
129.	Says, "Nobody likes me."	N S O A	174.	Congratulates others when good things happen to them.	N S O A
130.	Handles winning and losing well.	N S O A	175.	Has trouble concentrating.	N S O A
131.	Throws up after eating.	N S O A			
132.	Complains of stomach pain.	N S O A			
133.	Is easy to please.	N S O A			
134.	Accepts people who are different from his or her self.	N S O A			
135.	Is easily calmed when angry.	N S O A			

Please complete the General Comments on the back page.

BASC 3

Parent Rating Scales PRS–A

Adolescent Ages 12–21

Cecil R. Reynolds, PhD • Randy W. Kamphaus, PhD

Child's Name _____ (First Middle Last)

Date _____ (Month Day Year) Birth Date _____ (Month Day Year)

School _____ Grade _____

Child's Gender ☐ Male ☐ Female Age _____

Your Name _____ (First MI Last)

Your Gender ☐ Male ☐ Female

Your Relationship to Child ☐ Mother ☐ Father ☐ Guardian ☐ Other _____

Do you have concerns about this child's:

(a) Vision? Y N _____

(b) Hearing? Y N _____

(c) Eating habits? Y N _____

Instructions

This form contains phrases that describe how children may act. Please read each phrase and select the response that describes how this child has behaved recently (in the last several months).

Select **N** if the behavior **never** occurs.

Select **S** if the behavior **sometimes** occurs.

Select **O** if the behavior **often** occurs.

Select **A** if the behavior **almost always** occurs.

Please mark every item. If you don't know or are unsure of your response to an item, give your best estimate. A "Never" response does not mean that the child "never" engages in a behavior, only that you have no knowledge of it occurring.

How to Mark Your Responses

Be certain to circle completely the letter you choose:

N S (O) A

If you wish to change a response, mark an X through it and circle your new choice, like this:

N (S) ⊠ A

Before starting, be sure to complete the information above these instructions.

PEARSON

PsychCorp

Remember: N = Never S = Sometimes O = Often A = Almost always

1.	Pays attention.	N	S	O	A	46.	Is shy with other adolescents.	N	S	O	A
2.	Makes positive comments about others.	N	S	O	A	47.	Complains of pain.	N	S	O	A
3.	Is easily upset.	N	S	O	A	48.	Overreacts to stressful situations.	N	S	O	A
4.	Worries.	N	S	O	A	49.	Eats things that are not food.	N	S	O	A
5.	Gets into trouble.	N	S	O	A	50.	Says, "I want to die" or "I wish I were dead."	N	S	O	A
6.	Complains of being sick when nothing is wrong.	N	S	O	A	51.	Shows interest in others' ideas.	N	S	O	A
7.	Is easy to please.	N	S	O	A	52.	Steals.	N	S	O	A
8.	Likes to talk about his or her day.	N	S	O	A	53.	Acts out of control.	N	S	O	A
9.	Is organized.	N	S	O	A	54.	Handles winning and losing well.	N	S	O	A
10.	Acts without thinking.	N	S	O	A	55.	Manipulates others.	N	S	O	A
11.	Has strange ideas.	N	S	O	A	56.	Smokes or chews tobacco.	N	S	O	A
12.	Is a picky eater.	N	S	O	A	57.	Is good at getting people to work together.	N	S	O	A
13.	Says, "please" and "thank you."	N	S	O	A	58.	Expresses fear of getting sick.	N	S	O	A
14.	Cannot wait to take turn.	N	S	O	A	59.	Is cruel to animals.	N	S	O	A
15.	Plans well.	N	S	O	A	60.	Needs to be reminded to brush teeth.	N	S	O	A
16.	Finds fault with everything.	N	S	O	A	61.	Breaks the rules.	N	S	O	A
17.	Is a "self-starter."	N	S	O	A	62.	Has difficulty explaining rules of games to others.	N	S	O	A
18.	Says, "I think I'm sick."	N	S	O	A	63.	Gets angry easily.	N	S	O	A
19.	Is sad.	N	S	O	A	64.	Takes a step-by-step approach to work.	N	S	O	A
20.	Is fearful.	N	S	O	A	65.	Falls down or trips over things easily.	N	S	O	A
21.	Makes healthy food choices.	N	S	O	A	66.	Threatens to hurt others.	N	S	O	A
22.	Lies.	N	S	O	A	67.	Works well under pressure.	N	S	O	A
23.	Talks over others.	N	S	O	A	68.	Breaks the rules just to see what will happen.	N	S	O	A
24.	Avoids exercise or other physical activity.	N	S	O	A	69.	Bullies others.	N	S	O	A
25.	Seems odd.	N	S	O	A	70.	Communicates clearly.	N	S	O	A
26.	Loses control when angry.	N	S	O	A	71.	Complains of stomach pain.	N	S	O	A
27.	Has a short attention span.	N	S	O	A	72.	Recovers quickly after a setback.	N	S	O	A
28.	Teases others.	N	S	O	A	73.	Compliments others.	N	S	O	A
29.	Is usually chosen as a leader.	N	S	O	A	74.	Reacts negatively.	N	S	O	A
30.	Engages in repetitive movements.	N	S	O	A	75.	Breaks large problems into smaller steps.	N	S	O	A
31.	Gets sick.	N	S	O	A	76.	Uses foul language.	N	S	O	A
32.	Is easily stressed.	N	S	O	A	77.	Says, "I don't have any friends."	N	S	O	A
33.	Isolates self from others.	N	S	O	A	78.	Has trouble getting information when needed.	N	S	O	A
34.	Accurately takes down messages.	N	S	O	A	79.	Listens carefully.	N	S	O	A
35.	Says, "I hate myself."	N	S	O	A	80.	Is able to keep to a schedule.	N	S	O	A
36.	Sets realistic goals.	N	S	O	A	81.	Responds appropriately when asked a question.	N	S	O	A
37.	Throws or breaks things when angry.	N	S	O	A	82.	Accepts things as they are.	N	S	O	A
38.	Avoids eye contact.	N	S	O	A	83.	Quickly joins group activities.	N	S	O	A
39.	Seems out of touch with reality.	N	S	O	A	84.	Stares blankly.	N	S	O	A
40.	Disobeys.	N	S	O	A	85.	Deceives others.	N	S	O	A
41.	Changes moods quickly.	N	S	O	A	86.	Cleans up after self.	N	S	O	A
42.	Complains about health.	N	S	O	A	87.	Is easily distracted.	N	S	O	A
43.	Listens to directions.	N	S	O	A	88.	Has headaches.	N	S	O	A
44.	Is overly emotional.	N	S	O	A	89.	Cries easily.	N	S	O	A
45.	Is careless with belongings.	N	S	O	A	90.	Is unclear when presenting ideas.	N	S	O	A

Remember: N = Never S = Sometimes O = Often A = Almost always

91.	Makes others feel welcome.	N	S	O	A
92.	Is nervous.	N	S	O	A
93.	Is cruel to others.	N	S	O	A
94.	Seems lonely.	N	S	O	A
95.	Misses deadlines.	N	S	O	A
96.	Sleeps with parents.	N	S	O	A
97.	Confuses real with make-believe.	N	S	O	A
98.	Is in trouble with the police.	N	S	O	A
99.	Worries about what teachers think.	N	S	O	A
100.	Picks on others who are different from his or her self.	N	S	O	A
101.	Starts conversations.	N	S	O	A
102.	Is negative about things.	N	S	O	A
103.	Hits other adolescents.	N	S	O	A
104.	Says, "I'm not very good at this."	N	S	O	A
105.	Is effective when presenting information to a group.	N	S	O	A
106.	Tries to help others be their best.	N	S	O	A
107.	Interrupts parents when they are talking on the phone.	N	S	O	A
108.	Acts strangely.	N	S	O	A
109.	Has good coping skills.	N	S	O	A
110.	Says, "I can't do anything right."	N	S	O	A
111.	Complains of physical problems.	N	S	O	A
112.	Plans ahead.	N	S	O	A
113.	Has trouble making new friends.	N	S	O	A
114.	Disrupts other adolescents' activities.	N	S	O	A
115.	Argues when denied own way.	N	S	O	A
116.	Says things that make no sense.	N	S	O	A
117.	Says, "I want to kill myself."	N	S	O	A
118.	Sets fires.	N	S	O	A
119.	Pays attention when being spoken to.	N	S	O	A
120.	Worries about making mistakes.	N	S	O	A
121.	Says, "Nobody likes me."	N	S	O	A
122.	Lies to get out of trouble.	N	S	O	A
123.	Has trouble concentrating.	N	S	O	A
124.	Adjusts well to changes in routine.	N	S	O	A
125.	Throws up after eating.	N	S	O	A
126.	Overcomes problems.	N	S	O	A
127.	Avoids other adolescents.	N	S	O	A
128.	Accepts people who are different from his or her self.	N	S	O	A
129.	Adjusts well to changes in family plans.	N	S	O	A
130.	Has poor self-control.	N	S	O	A
131.	Offers help to other adolescents.	N	S	O	A
132.	Gives good suggestions for solving problems.	N	S	O	A
133.	Tracks down information when needed.	N	S	O	A
134.	Has seizures.	N	S	O	A
135.	Worries about things that cannot be changed.	N	S	O	A
136.	Makes decisions easily.	N	S	O	A
137.	Adjusts well to new teachers.	N	S	O	A
138.	Hurts others on purpose.	N	S	O	A
139.	Is suspicious of others.	N	S	O	A
140.	Is irritable.	N	S	O	A
141.	Appears tense.	N	S	O	A
142.	Is able to describe feelings accurately.	N	S	O	A
143.	Organizes chores or other tasks well.	N	S	O	A
144.	Prefers to play alone.	N	S	O	A
145.	Babbles to self.	N	S	O	A
146.	Gets back at others.	N	S	O	A
147.	Encourages others to do their best.	N	S	O	A
148.	Is highly motivated to succeed.	N	S	O	A
149.	Avoids making friends.	N	S	O	A
150.	Seems unaware of others.	N	S	O	A
151.	Acts in a safe manner.	N	S	O	A
152.	Has panic attacks.	N	S	O	A
153.	Says, "I'm afraid I will make a mistake."	N	S	O	A
154.	Is afraid of getting sick.	N	S	O	A
155.	Runs away from home overnight.	N	S	O	A
156.	Adjusts well to changes in plans.	N	S	O	A
157.	Sneaks around.	N	S	O	A
158.	Is clear when telling about personal experiences.	N	S	O	A
159.	Shows basic emotions clearly.	N	S	O	A
160.	Puts others down.	N	S	O	A
161.	Is resilient.	N	S	O	A
162.	Uses illegal drugs.	N	S	O	A
163.	Says, "I get nervous during tests" or "Tests make me nervous."	N	S	O	A
164.	Is overly aggressive.	N	S	O	A
165.	Makes friends easily.	N	S	O	A
166.	Has trouble making decisions.	N	S	O	A
167.	Tells lies about others.	N	S	O	A
168.	Evaluates own ideas.	N	S	O	A
169.	Does weird things.	N	S	O	A
170.	Congratulates others when good things happen to them.	N	S	O	A
171.	Prefers to be a leader.	N	S	O	A
172.	Interrupts others when they are speaking.	N	S	O	A
173.	Finds ways to solve problems.	N	S	O	A

Please complete the General Comments on the back page.

Appendix H

CSQ-8

CLIENT SATISFACTION QUESTIONNAIRE

Please help us improve our program by answering some questions about the services you have received. We are interested in your honest opinions, whether they are positive or negative. *Please answer all of the questions*. We also welcome your comments and suggestions. Thank you very much; we really appreciate your help.

Circle your answer:

1. **How would you rate the quality of service you have received?**

4	3	2	1
Excellent	Good	Fair	Poor

2. **Did you get the kind of service you wanted?**

1	2	3	4
No, definitely	No, not really	Yes, generally	Yes, definitely

3. **To what extent has our program met your needs?**

4	3	2	1
Almost all of my needs have been met	Most of my needs have been met	Only a few of my needs have been met	None of my needs have been met

4. **If a friend were in need of similar help, would you recommend our program to him or her?**

1	2	3	4
No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely

5. **How satisfied are you with the amount of help you have received?**

1	2	3	4
Quite dissatisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied

6. **Have the services you received helped you to deal more effectively with your problems?**

4	3	2	1
Yes, they helped a great deal	Yes, they helped	No, they really didn't help	No, they seemed to make things worse

7. **In an overall, general sense, how satisfied are you with the service you have received?**

4	3	2	1
Very satisfied	Mostly satisfied	Indifferent or mildly dissatisfied	Quite dissatisfied

8. **If you were to seek help again, would you come back to our program?**

1	2	3	4
No, definitely not	No, I don't think so	Yes, I think so	Yes, definitely

Appendix I

Interview Guides

Qualitative Interview Guide: Parent Version

Introduction: "This interview will take approximately 45 minutes. The reason for this interview is to hear about your perceptions and experiences of the [insert which treatment program] that your child completed. We would like to hear your honest opinions about the program. We would like to better understand things that went well and things that didn't so that we can continually improve the program. Please do not hesitate to provide any constructive criticism.

I will be audio recording this interview so it can be transcribed later. None of the treatment providers will have access to your recording or any transcripts of it. If you happen to refer to a name or other identifying information during the interview, it will be removed from the transcript. What you share during this interview will in no way impact any further services that you seek at Alvord Baker. Quotes from your interview may be used in research presentations or publications; however, the quote will not be attached to your name and will be grouped with quotes from other participants.

Any time you want to stop the interview or have me turn off the recording, you can tell me, and we will stop.

Do you have any questions before we begin?"

***Acceptability**- the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory*

"I'd like to begin by asking you some questions about your overall experience with the [insert program]."

1. In general, what was your experience like with [insert program]? How would you describe your experience?
    a. [PROBE] Can you tell me about your experience working with Drs. Raggi and O'Brien and your child's counselor?
    b. [PROBE] What difficulties or challenges, if any, did you experience in having your child enrolled in the program?

2. How satisfied are you with your experience with [insert program]?
    a. [PROBE] What aspects of the program did you find most helpful and least helpful?
    b. [PROBE] What did you think about the group format and having a 1-on-1 counselor for your child?
    c. [PROBE] How satisfied are you with the parent training meeting? Is there anything you'd change about the meeting?

d. [PROBE] What skills or discussions did you find most useful?

Appropriateness- *the perceived fit, relevance, or compatibility of the evidence-based practice for a given practice setting, provider, or consumer; and/or the perceived fit of the innovation to address a particular issue or problem*

"Now I would like to ask you some questions about how well the program met your child's treatment needs for anxiety."

1. First, can you tell me about why you chose to enroll your child in [insert program]?
    a. [PROBE] Has your child also done [insert camp/weekly group as applicable]? If so, why did you also choose to enroll your child in [insert program]?

2. What treatment needs did the program fill?
    a. [PROBE] How well did the program meet your child's treatment needs?
    b. [PROBE] Are there treatment needs that the program didn't fill or is there anything that you would have added to the treatment program to make it a better fit for your child?
    c. [PROBE] Was there anything about this program in particular that was a better fit for your child than other approaches you've tried?

3. Can you describe any changes you noticed in your child's behavior around other people after s/he completed the program?

Feasibility- *the extent to which a new treatment can be successfully used or carried out within a given agency or setting*

"Now I would like to ask you a few questions about how feasible it was for you to have your child enroll in [insert program]."

1. What was your experience like with the practical aspects of your child attending the treatment program?
    a. [PROBE] What was your experience finding the program and enrolling your child in it?
    b. [PROBE] What difficulties or challenges did you experience?
    c. [PROBE] What made it easier or possible for you to enroll your child in this program?
    d. [PROBE] What did you think about the timing and location of the treatment?

2. If you are comfortable sharing this information, I'd like to better understand the costs associated with this program. I understand that the program fee was [insert program fee]. Were there any additional costs associated with your child attending the program? For example, did you have to take time off of work or hire someone to transport your child to/from the program?
    a. [PROBE] What are your thoughts on the cost of the program?

Wrap-up

1. What other thoughts do you have about the treatment program (positive or negative)?

"Thank you for your time and for sharing your insights. We hope to use this information to improve the program and we are very appreciative of your input. "

Qualitative Interview Guide: Counselor Version

Introduction: "This interview will take approximately 30 minutes. The reason for this interview is to hear about your perceptions and experiences as a counselor for [insert program]. We would like to hear your honest opinions about the program. We would like to better understand things that went well and things that didn't so that we can improve the program.

I will be audio recording this interview so it can be transcribed later. No one at Alvord Baker will have access to your recording or any transcripts of it. If you happen to refer to a name or other identifying information during the interview, it will be removed from the transcript. Quotes from your interview may be used in research presentations or publications; however, the quote will not be attached to your name and will be grouped with quotes from other participants.

Any time you want to stop the interview or have me turn off the recording, you can tell me, and we will stop.

Do you have any questions before we begin?"

Interviewer*—if counselor has worked in both treatment programs, prompt for their experiences in each.*

Feasibility- *the extent to which a new treatment can be successfully used or carried out within a given agency or setting*

To start off, can you tell me a little bit about where you are in your training or in your career?
[PROBE] Can you tell me more about your prior training/experience providing treatment to children?
[PROBE] Which Alvord Baker SM programs have you been a counselor for?

1. Tell me about your experience being recruited for this program. How did you find out about it?

2. What are your thoughts on the burden of training?
    a. [PROBE] What challenges did you have in learning the skills? What made learning them easier?

b. [PROBE] What do you think could be added to training to increase counselor competence?

3. Tell me about the burden of being a counselor during the treatment period.

4. What made it possible for you to participate in this program as a counselor? What would make it easier or more appealing for you to participate as a counselor?

5. If you have worked in other clinical settings, how feasible do you think it would be to run this program in those settings?

6. This is a volunteer position; that is, you are not compensated financially for your time. What are your thoughts on this?

Acceptability- *the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory*

Now I'd like to ask you some questions about your overall experience as a counselor for the [insert program].

1. In general, what was your experience like as a counselor for [insert program]?
    a. [PROBE] What are your thoughts on the supports, training, and supervision that you received?
    b. [PROBE] What difficulties or challenges did you experience?

2. How satisfied are you with your experience with [insert program]?

3. What changes, if any, would you make to the treatment program itself or to the supports, training, or supervision that you received?

Appropriateness- *the perceived fit, relevance, or compatibility of the evidence based practice for a given practice setting, provider, or consumer; and/or the perceived fit of the innovation to address a particular issue or problem*

Now I'd like to ask you some questions about how well the program fit for you as a counselor and how well it fit for the children you worked with.

1. Overall, how does the program fit with your training and work as a therapist, or with your goals as a student/post-baccalaureate?

2. What did you see as the benefits of using PCIT-SM as a broad treatment model? What were the drawbacks of this model?

3. How confident did you feel implementing fade-ins and fade-outs and using the CDI and VDI skills?

4. What were some of the difficulties or challenges that you encountered while implementing the treatment?

5. Is there anything you would change to make this program more relevant for this population?

Wrap-up

1. What other thoughts do you have about the treatment program (positive or negative) or the role of counselors in it?

"Thank you for your time and for sharing your insights. We hope to use this information to improve the program and we are very appreciative of your input. "

Qualitative Interview Guide: Program Director Version

Introduction: This interview will take approximately 45 minutes. The reason for this interview is to hear about your perceptions and experiences of the [insert which treatment program]. We would like to hear your honest opinions and thoughts about the program.

I will be audio recording this interview so it can be transcribed later. If you happen to refer to a name or other identifying information during the interview, it will be removed from the transcript. Quotes from your interview may be used in research presentations or publications; however, the quote will not be attached to your name and will be grouped with quotes from other participants.

Any time you want to stop the interview or have me turn off the recording, you can tell me, and we will stop.

Do you have any questions before we begin?

Interviewer*- prompt for perspective on both treatment programs.*

Acceptability- *the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory*

To start off, can you tell me a bit about why you started the SM Program?

1. What difficulties or challenges did you encounter?
    - [PROBE] What difficulties or challenges did you encounter with the practice owner?

2. Tell me about your experience running the treatment programs.

3. How satisfied are you with the treatment program?

- [PROBE] What changes, if any, would you make to the treatment programs or to the supports you receive from the practice or your colleague(s)?

4. What differences do you see in client satisfaction between the weekly and intensive programs?

Appropriateness- *the perceived fit, relevance, or compatibility of the evidence based practice for a given practice setting, provider, or consumer; and/or the perceived fit of the innovation to address a particular issue or problem*

1. What do you see as the main benefits of the treatment? What are the drawbacks? [Probe for both SM Camp and SM Weekly program.]
    - [PROBE] What needs or gaps in care does this treatment fill? Are there additional unmet needs that the program doesn't address?
    - [PROBE] How is this intervention different from other available treatments?
2. What are the benefits/drawbacks of drawing treatment techniques from PCIT-SM?

3. How does the treatment fit in within the larger Alvord Baker practice?

4. How does the program fit with your training, expertise, and work as a clinician?

5. Tell me about differences you see in changes and improvements in children who enroll in the intensive vs. weekly treatment programs.

Feasibility- *the extent to which a new treatment can be successfully used or carried out within a given agency or setting*

1. Tell me about program start up [prompt for discussion of both the intensive and weekly programs].
    - [PROBE] What funding, resources (e.g., people, space, materials, time), and training do you need to be able to run the program?

2. Your program has been running for several years. What helps its sustainability?

3. Who is involved in client recruitment and counselor recruitment and how is it done?

4. Tell me about your experience recruiting, training and supervising volunteer counselors. Are you compensated for the time you spend training the volunteer counselors?

5. The treatment aims to pair each child with an individual counselor. Your volunteer counselors are typically doctoral students in clinical psyc who come

from nearby universities. How would you run your treatment if these students were not available? Is it possible to run the programs without volunteer assistance?

6. What challenges come from having similar, competing programs operating nearby and how do you handle them?

7. What do you see as barriers to children's successful completion of treatment?

8. What are the barriers to being able to successfully operate the treatment program?

Qualitative Interview Guide: Practice Owner Version

Introduction: This interview will take approximately 30 minutes. The reason for this interview is to hear about your perceptions and experiences of the business and agency-level aspects of [insert which treatment program]. We would like to hear your honest opinions and thoughts about the program.

I will be audio recording this interview so it can be transcribed later. If you happen to refer to a name or other identifying information during the interview, it will be removed from the transcript. Quotes from your interview may be used in research presentations or publications; however, the quote will not be attached to your name and will be grouped with quotes from other participants.

Any time you want to stop the interview or have me turn off the recording, you can tell me, and we will stop.

Do you have any questions before we begin?

Interviewer*—prompt for perspective on both treatment programs.*

Acceptability- *the perception among implementation stakeholders that a given treatment is agreeable, palatable, or satisfactory*

- What is your sense about the community's overall response to this program?
- How satisfied are you with the treatment program?
- From a business perspective, what changes, if any, would you make to the program?

Appropriateness- *the perceived fit, relevance, or compatibility of the evidence-based practice for a given practice setting, provider, or consumer; and/or the perceived fit of the innovation to address a particular issue or problem*

- How does the treatment program fit within the larger Alvord Baker practice?
- What do you see as the main benefits of offering this particular service?

- What are the main costs (e.g., monetary, time) associated with running the program?

Feasibility- *the extent to which a new treatment can be successfully used or carried out within a given agency or setting*

- What factors did you consider (both positive and negative) before supporting this program's implementation at Alvord Baker?
    - Prompt for: clinical need, business need/available resources (e.g., space), expertise and training of SM Program Directors
- What supports has the program needed for start-up or maintenance (e.g., fronting funding, advertisement, administrative support)?
- Were there any concerns about bringing in paraprofessional buddies (e.g., legal concerns, concerns related to training volunteers or time needed for training)?
- Would the intensive or weekly group programs be possible without the volunteer help? That is, without the close relationship of the programs with nearby universities, would the program be sustainable?
- How successful do you think the program has been? What do you see as contributing to its success and sustainability?
    - Prompt for: within the practice and within the community
- What have been barriers or challenges to implementing the program?

Appendix J

Codebooks

Parent Qualitative Interviews	
Node/Code Name	**Node/Code Definition**
Areas for Improvement	Phrases related to things parents did not like about the treatment program or things parents expressed dissatisfaction about
Barriers	Phrases related to factors that made attending or enrolling in the treatment program difficult or less desirable
CDI or VDI Skills	Phrases related to child-directed interaction or verbal-directed interaction skills
Child Satisfaction	Phrases related to satisfaction with the program
Communication- Program	Phrases related to communication about enrolling in treatment program or about program logistics
Communication- Treatment	Phrases related to communication between parent and counselor or between parent and clinician *during* the course of treatment, including daily feedback report
Concurrent Treatment	Phrases related to on-going treatment during the treatment program
Cost	Phrases related to monetary cost of treatment
Counselors	Phrases related to counselors (also called Big Buddies)
Developmental Appropriateness	Phrases that suggest treatment components (activities, procedures, format, etc.) were suitable for the participant's age

Effectiveness	Phrases related to changes (positive, negative, or lack thereof) parents noticed in the child during or after treatment
Facilitators	Phrases related to factors that made attending or enrolling in the treatment program doable or easier
Fading	Phrases related to fade-ins and fade-outs
Familiarity	Phrases related to familiarity with the clinician or with the practice
Future Treatment	Phrases related to implementing treatment techniques, following up with treaters, or engaging in other therapeutic activities/programs after the current treatment program
Impairment	Phrases related to the negative impact of SM/social anxiety on the child and/or his/her family
Individualized Treatment	Phrases regarding how the group treatment was made specific to or was tailored for an individual child
Parent-Child Factors	Phrases about the parent-child relationship or parent-child interactions
Parent Meeting	Phrases about the parent meeting/parent group held during the course of treatment
Parent Satisfaction	Phrases related to satisfaction with the treatment program or aspects of it
Parent Support	Phrases related to parents' expressions of feeling supported during the treatment program
Previous Treatment	Phrases related to treatment the child received prior to the treatment program
Program Accessibility	Phrases related to location, time of day, traffic, etc.

Program is Special	Phrases related to the idea that the treatment program is unique
Reasons for Enrolling	Phrases related to reasons the parent enrolled the child in the treatment program
Rewards	Phrases related to prizes or other rewards
Role of Parent	Phrases related to role parents play in supporting their child or implementing treatment/exposures
School	Phrases related to positive or negative appraisals of school formal or informal accommodations/services for SM/anxiety
Treatment Content	Phrases related to content of treatment (exposure, coping skills, generalization activities, etc)
Treatment Format	Phrases related to treatment format (group, number of days/hours per week, drop off or pick up procedures, etc)
Treatment Goals	Phrases related to goals the parent had for the child during treatment

Counselor Qualitative Interviews	
Node/Code Name	**Node/Code Definition**
Areas for Improvement	Phrases related to things counselors did not like about the program or things that could be done/done better
Background	Phrases related to the counselor's educational background and prior clinical experience
Barriers	Phrases related to factors that made participating in the program as a counselor difficult or less desirable

Burden	Phrases related to burden of training and/or participation in the program as a counselor
Compensation	Phrases related to compensation
Confidence	Phrases related to counselors expressions of confidence in implementing the treatment protocols
Counselor Goals	Phrases related to counselors reasons for participating in the program (e.g., training, hours for internship, exposure to specific population)
Effectiveness	Phrases related to changes counselors noticed in children during treatment
Facilitators	Phrases related to factors that made participating in the program as a counselor easier or doable
Feasibility of Program	Phrases related to factors associated with the treatment program being carried out; phrases associated with the overall success or failure of the program
Other Counselors	Phrases related to interactions with other counselors during the program. Also, phrases related to other counselors' skill use or behavior in the program.
Outside Work	Phrases related to SM-related services/work provided by the counselor outside of the weekly group/camp (e.g., fade ins)
Parents	Phrases related to interactions with parents during the course of treatment
Program Accessibility	Phrases related to counselor experiences regarding location, time of program, traffic, etc
Recruitment	Phrases related to how counselors became aware of and involved with the program

Satisfaction	Phrases related to satisfaction with the program or aspects of it
Supervision	Phrases related to supervision of clinical activities by the program directors
Training	Phrases related to pre-program training and didactics
Treatment Challenges	Phrases related to difficulties or challenges experienced during the course of treatment
Treatment Content	Phrases related to content of treatment (exposures, coping skills, generalization activities, etc.)
Treatment Format	Phrases related to treatment format (group, #hours/days, one-on-one pairing)
Treatment Fit and Model	Phrases related to how the treatment program is relevant for children with SM; phrases related to PCIT-SM (CDI/VDI/fading)

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