

THE EFFICACY OF A COGNITIVE BEHAVIORAL THERAPY-BASED
INTENSIVE PROGRAM FOR ADOLESCENTS WHO STUTTER:
A QUALITATIVE AND QUANTITATIVE APPROACH

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ABSTRACT

The primary purpose of this study was to assess the efficacy of Speak Now, a five-day intensive CBT-based summer camp for adolescents who stutter, in improving communicative self-efficacy and reducing the impact of stuttering. It was predicted that attending Speak Now would lead to an increase in self-efficacy in communication situations as measured the *Self Efficacy for Adolescents Scale* (SEA-Scale) and a reduction in the impact of stuttering as measured by the *Overall Assessment of Speakers Experience of Stuttering* (OASES). Phenomenological analysis was performed of parent interviews regarding their child's experience at camp to determine what themes emerged. Scores decreased in the sections of the OASES that measured general knowledge, reactions to stuttering, and overall quality of life, although subject variables and a small sample size probably contributed to a lack of statistical significance in the results. Phenomenological analysis of parent interviews revealed six themes: 1) campers benefitted from peer engagement with other children who stutter; 2) campers were anxious before starting camp; 3) parents benefitted from the experience of interacting with other parents of children who stutter; 4) parents benefitted from hearing the thoughts and feelings of other children who stutter; 5) parents observed an increase in confidence and relaxation for their children in speaking situations following camp; 6) parents learned about stuttering and how to help their child from camp. Clinical implications as well as directions for future research are discussed.

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CHAPTER 1

INTRODUCTION

Research suggests that there is a relationship between stuttering and anxiety (Craig, Hancock, Tran, & Craig, 2003; Davis, Shisca, & Howell, 2007; Iverach, Menzies, O’Brian, Packman, & Onslow, 2011), particularly state-anxiety associated with communication situations. A recent movement in Speech-Language Pathology has called for a holistic shift in the treatment of people who stutter away from a narrow focus on motor and linguistic features of stuttering toward a more comprehensive perspective considering cognitive, affective, and social aspects underlying stuttering. Cognitive behavioral therapy (CBT) may be an effective therapeutic approach for treating the negative attitudes and beliefs of people who stutter (Menzies, Onslow, Packman, & O’Brien, 2009). Amelioration of negative attitudes and beliefs is important to the promotion of communicative interactions, regardless of the impact on stuttering itself. This study investigates the effects of an intensive one-week CBT-based intervention program for adolescents who stutter. Both qualitative and quantitative methods are used.

Literature Review

Anxiety is one of the most frequent psychological concomitants in adults who stutter (Iverach et al., 2011). Anxiety is a complex psychological construct, the experience of which includes thoughts and expectancies of negative events, escape or avoidance behaviors of feared situations, and physical sensations such as heart palpitations and muscle tension (Menzies, Onslow, & Packman, 1999). Although older evidence exists that suggest that people who stutter (PWS) are not at heightened risk for anxiety or depression

(Miller & Watson, 1992), more current research published in the past 15 years, which has focused on measures of both state and trait anxiety, provides stronger evidence of a relationship between stuttering and anxiety. PWS show some state anxiety when faced with certain speaking situations that invoke expectancies of social harm and fear of negative evaluation (Iverach et al., 2011).

One study comparing a large sample of Australian adults who stutter (AWS) to a control group of normally-fluent adults (NFA) found that AWS are six- to seven-times more likely to meet diagnostic criteria for an anxiety disorder as defined by the DSM-IV or ICD-10 (Iverach et al., 2009). Another randomized population study found that rates of stable anxiety attributes, or trait anxiety, of AWS were significantly higher than levels for the general population (Craig et al., 2003). In their meta-analysis of research assessing trait anxiety and social anxiety in adults who stutter, Craig & Tran (2014) conclude that adults with chronic stuttering have significantly elevated trait anxiety and social anxiety. However, it may be that rather than having trait anxiety as part of their personalities, PWS have state anxiety that is restricted to domains of speech (Miller & Watson, 1992). Some research suggests that while people who stutter do not have elevated rates of trait anxiety, they do present with higher state anxiety (Davis, Shisca, & Howell, 2007). Unlike trait anxiety, state anxiety is transient rather than stable and characterized by unpleasant emotional arousal experienced in demanding or dangerous situations (Lazarus, 1991). Messenger and colleagues (2004) suggested that the relationship between anxiety and stuttering is mediated by the expectancy of social harm, with people who stutter having higher expectancy of social harm than NFA. People who stutter have been reported to experience significantly greater levels of emotional tension or discomfort in social

situations, as well as lower frequency of social responses compared to individuals who do not stutter (Kraaimaat, Vanryckeghem, & Van Dam-Baggen, 2002).

Less research exists examining the relationship between stuttering and anxiety in children and adolescents. Smith and colleagues (2014) conducted a meta-analysis on this topic and concluded the prevalence of anxiety in young people who stutter and age of onset could not be determined due to methodological limitations. However, it seems that anxiety in children who stutter (CWS) might increase over time as they experience negative social consequences and negative attitudes toward communication (Smith et al., 2014). Indeed, as early as age six, CWS exhibit significantly stronger negative attitudes toward speaking than their typically fluent peers, and this difference appeared to increase with age (Vanryckeghem & Brutton, 1997). As children age, negative attitudes toward speech as measured by the Communication Attitude Test increase for CWS, whereas the same attitudes decrease for their typically fluent peers (Vanryckeghem & Brutton, 1997). Mirroring research with adult populations, research indicates adolescents who stutter have significantly higher trait, state, and social anxiety than typically fluent adolescents (Mulcahy, Hennessey, Beilby, & Byrnes, 2008).

Adolescents who stutter have been found to have lower self-perceived communicative competence and higher levels of communication apprehension than typically fluent peers (Blood, Blood, Tellis, & Gabel, 2001; Erickson & Block, 2013). It has been hypothesized that high levels of communication apprehension may lead to the maintenance of low communicative competence (Blood et al., 2001). In turn, high communication apprehension is associated with more negative attitudes toward school and poorer overall academic performance (Monroe, Borzie, & Burrell, 1992; Rosenfeld, Grant,

& McCroskey, 1995). Furthermore, teachers rate these students to be less intelligent, competent, responsive and friendly (McCroskey & Daly, 1976). This may place adolescents who stutter at particular risk for school failure, as speaking is a large component in many classroom activities (Blood et al., 2001).

Reduced communicative competence may also place adolescents who stutter at a heightened risk for bullying, which has been found to have serious, long-term negative outcomes including poor health, wealth, and deleterious social-relationship outcomes (Wolke, Copeland, Angold, & Costello, 2013). A study investigating the effects of bullying in people who stutter found that the majority of people who stutter who had been bullied reported immediate negative effects, and 46% reported some long-term effects (Hugh-Jones & Smith, 1996). Blood & Blood (2004) report that 43% of adolescents who stuttered experienced bullying over the course of one week, a significant difference from the 11% of typically fluent peers who reported the same, and students with poor communicative competence were more likely to be victimized by bullies. Another study reports 59% of CWS had been teased or bullied about stuttering, with 56% of those children reporting being teased/bullied at least once a week (Langevin, Bortnick, Hammer, & Wiebe, 1998). These findings were supported by Erickson and Block (2013), who found that adolescents who stutter are teased more than their typically fluent peers. Bullying has also been found to correlate with state anxiety in teenagers who stutter (Cooke & Howell, 2014). Beyond being bullied, CWS are more likely to be rejected by peers and are significantly less likely to be popular (Davis, Howell, & Cooke, 2002).

There appears to be some evidence that stuttering may also impact the families of children and adolescents who stutter. Erickson and Block (2013) measured the impact of

having a child who stutters on families using a parent questionnaire measuring the degree to which parents perceived stuttering had impacted upon the family both generally and in specific ways such as financially or emotionally. Sixty-nine percent of the parents reported that stuttering had at least a “moderate” impact on their family with 31% of parents indicating it had a "very high" impact. Seventy percent of parents indicated that stuttering had at least a "moderate" impact on their child. Families experience a significant level of emotional and financial stress, as 57% of the parents surveyed reported making sacrifices for their child including “missing work for treatment” and “time or financial sacrifices” (Erickson & Block, 2013). A qualitative analysis revealed that in addition to experiencing stress associated with having a child who stutters, many parents also expressed feelings of uncertainty and become overly concerned regarding what is best to do for their child (Plexico & Burruss, 2012).

Given the research summarized above, there is reason to incorporate the management of social anxiety and low self-perception of communicative competence into treatment for people who stutter as the evidence that treatment that is focused solely on the motor and linguistic aspects of stuttering (surface features) does not result in normalizing the negative speech-related attitudes (Andrew & Cutler, 1974). Rather, negative speech-related attitudes may interfere with speech-restructuring treatment, as Guitar and Bass (1978) found that clients with persistent negative speech-related attitudes were more likely to have poor treatment outcomes. Furthermore, the presence of state anxiety in adults who stutter may predict poor response to a speech-restructuring treatment (Kraaimaat, Janssen, & Bruten, 1988). Some authors hypothesize that social anxiety and negative attitudes

towards speaking account for the high relapse rate among individuals who have received treatment for stuttering (Menzies et al., 2009).

Stuttering intervention research has seen a recent trend toward incorporating treatment of communication related negative attitudes rather than solely focusing on the surface features of stuttering. One method that has been used to address negative attitudes and anxiety surrounding stuttering is cognitive behavior therapy (CBT), developed in the fields of clinical psychology and psychiatry. The theory behind CBT proposes that symptoms and dysfunctional behaviors can be cognitively mediated by modifying unhelpful and negative thoughts and beliefs (Dobson & Dozois, 2001). CBT is effective in reducing anxiety in adults, children, and adolescents (Hoffman & Smits, 2008; Cartwright et al., 2004). The aim of CBT for people who stutter is to treat the cognitive, affective, and social aspects underlying stuttering (Menzies et al., 2009). This includes reducing communication apprehension, reducing negative expectations of social harm, and increasing perceived communicative self-competence.

Menzies and colleagues (2009) provide a tutorial regarding how clinicians can incorporate CBT into treatment for adults who stutter. They describe four components of CBT treatment: *exposure*, *cognitive restructuring*, *behavioral experiments*, and *attentional training*. *Exposure* involves the individual facing a situation that induces fear or anxiety without using any avoidance or escape strategies. The goal of *exposure* in CBT is to provide evidence that contradicts dysfunctional threat-related expectancies. The person who stutters then can evaluate these expectancies. *Exposure* takes place in a hierarchical manner such that early sessions involve situations perceived as less anxiety-inducing and later sessions involve more feared tasks, usually addressed in a “fear hierarchy” developed by

the clinician and person who stutters. *Cognitive restructuring* involves challenging negative beliefs and judgments. People who stutter learn to identify and systematically modify any irrational thoughts. *Behavioral experiments* involve the individual intentionally stuttering in social situations and comparing predicted outcomes to what actually takes place. *Attentional training* involves mindfulness-based procedures in which the individual increases their capacity to attend to alternative cognitive targets (Menzies et al., 2009).

A small body of research has investigated the efficacy of CBT for adults who stutter. Stein, Baird, and Walker (1996) reported anecdotal support in which three individuals experienced reductions in social anxiety, avoidance, and overall disability following a 12-week CBT program. Blood (1995a) investigated the use of a computer-based speech restructuring program in conjunction with CBT-based “relapse management program” for four individuals who stuttered. This program included three main components: problem solving, cognitive restructuring/reframing, and non-directive support counseling. Subjects both reduced their disfluencies and improved positive feelings and attitudes. Both these changes were maintained at 6 and 12 months follow up (Blood, 1995a). However, it is not possible to tease apart the effects of the CBT component from the effects of the speech restructuring program. Similarly, Nielson (1999) described success in using CBT procedures in conjunction with speech-restructuring treatment, but it is not possible to discern the impact CBT versus the speech restructuring.

McColl, Onslow, Packman, & Menzies (2001) delivered a CBT package to 11 individuals who had previously failed to generalize speech-restructuring skills outside the clinic to everyday conversations. The participants received 12 weekly sessions each lasting one hour and showed reductions in state anxiety levels, self-rated stuttering severity, and a

reduced fear of negative evaluation (McColl, Onslow, Packman, & Menzies, 2001). However, this study did not include a no-CBT comparison group, nor did the authors report follow-up data. Another study showed that, following a five-day intensive CBT-based treatment, adults showed a significant reduction on the Unhelpful Thoughts and Beliefs about Stuttering Checklist (St. Clare et al., 2009). However, no comparison group was included in this study, nor did it include follow-up data to determine if this reduction was maintained.

To remedy previous methodological limitations of efficacy research on CBT for people who stutter, Menzies and colleagues (2008) conducted an experimental clinical trial comparing speech restructuring therapy following ten weekly sessions of CBT for social anxiety with speech restructuring alone. Participants were randomly assigned to a treatment group. At 12-month follow up, those individuals that received both CBT and speech restructuring therapy showed significantly higher Global Assessment of Functioning Scores (GAF), reduced avoidance of social situations, and reduced diagnoses of social anxiety. While 66% of those individuals in the CBT group received a diagnosis of social anxiety pre-treatment, none of them warranted this diagnosis at follow up. There was no difference in stuttering between the two groups (Menzies et al., 2008).

The intervention research discussed thus far has focused on treatment for adults who stutter. However, researchers argue that it is important to address the negative attitudes and beliefs before adulthood in treatment with children and adolescents who stutter (Yaruss, Coleman, & Quesal, 2012; Healey & Scott, 1995; Ramig & Bennett, 1995). Similarly, the American-Speech-Language-Hearing Association (ASHA) in its guide for best practice in treating childhood fluency disorders recommends treatments that not only

work toward increasing fluency but also increasing acceptance, minimizing avoidance, and increasing self-confidence (American Speech-Language-Hearing Association, n.d.). Adolescence may be a uniquely important time to intervene in many of these areas (Fry, Millard, & Botterill, 2014). During adolescence, rapid physical, social, cognitive, and emotional changes occur (Dahl & Gunnar, 2009). The development of executive functioning leads to increased mental flexibility, ability to self-monitor, and problem-solve (Crone, 2009). Therefore, as Fry, Millard, and Botterill (2014) point out, “the normal maturation of adolescence may therefore result in both greater awareness of stuttering and increased self-consciousness about it...adolescents also bring a set of cognitive skills that help them to engage more successfully than when younger, in a process which requires more self-monitoring, reflection and self-direction” (p. 114).

Research in this area is limited. Murphy, Yaruss, & Quesal (2007) provide an anecdotal account of improved communication attitudes as well reduced frequency and severity of stuttering following a comprehensive approach that combined CBT, fluency shaping, and structuring modification approaches. Blood (1995b) investigated the use of a CBT program for adolescents who stutter. Three adolescents who stutter participated in a CBT relapse management program and showed a reduction in stuttering severity as measured by percent syllables stuttered, as well as positive changes in attitudes and feelings, which were maintained at 12-month follow up (Blood, 1995b).

Some researchers have suggested that an intensive program may be more effective for adolescents than CBT programs with less intensive dosage (Fry, Botterill, Pring, 2009; Millar, 2011; Fry, Millard, & Boterill, 2014). Hearne, Packman, Onslow, and Quine (2008) interviewed adolescents who stutter and found that most adolescents reported intensive

group therapy to be most beneficial. Fry et al. (2009) describe an intensive program lasting two weeks combining CBT with fluency management components. A single case-study revealed significant trend of reduced severity of stuttering (Fry et al., 2009). However, the authors did not include measures of his speech related attitudes. Millard (2011) describes a two-week intensive program, which also combined CBT with fluency shaping. In this study, 15 children ages ten to fourteen showed reduced negative impact of stuttering on participants' lives, as well as reduced stuttering frequency, severity, which was maintained six weeks following the program (Millard, 2011). However, the design of the study did not effectively differentiate the effects of CBT intervention from the effects of the fluency-shaping therapy. Fry, Millard, & Botterill (2014) showed a significant reduction in stuttering at 5-months following inclusion in an intensive group treatment for teenagers which combined speech management skills, CBT, and communication skills training. Participants also reported increased self-efficacy about speaking (Fry, Millard, & Botterill, 2014).

Byrd et al. (2016) described five camps for CWS. These camps were all designed for school-aged children from age four through adolescence and all but one camp offered intensive therapy over the span of one week. These camps also all used a mix of individual and group therapy and involved some form of parental involvement. Preliminary outcome data reported on one of these camps indicated that attendees showed a significant reduction in impact of stuttering on quality of life as measured by a self-report questionnaire (Byrd et al., 2016). Williams (2015) investigated the efficacy of a CBT-based, intensive, five-day summer camp which promotes self-acceptance and aims to improve the quality of life of adolescents who stutter. This single-case study showed improvements in self-efficacy

surrounding communication situations and improvements in overall speaking-related attitudes, which were maintained at one and three month follow-ups (Williams, 2015). In addition, the mother of the participant reported that the camp helped her son accept himself as a person who stutters and build his confidence in speaking situations. She also reported that the camp helped her as a parent, as she had an opportunity to be around other parents of people who stutter (Williams, 2015).

Most of the research cited to this point has relied on quantitative methodologies utilizing controlled experimental research, and indeed approximately 90% of published studies have relied solely on quantitative methods (Bothe & Andreatta, 2004). However, recently researchers have called for the inclusion of qualitative studies in research on stuttering to broaden understanding of the disorder and the best treatments (Cheek, Onslow, & Cream, 2004; Tetnowski & Damico, 2004). Tetnowski and Damico (2004) argue that exploring the complex issue of stuttering in a fashion that controls all variables reduces the authenticity of responses and therefore validity of the research. Researchers also argue that the strict adherence to quantitative methods may account for the high relapse rate and failure to find effects in stuttering treatment research (Cheek, Onslow, & Cream, 2004). As such, our aims are to replicate the findings of Williams (2015) with a larger group of adolescents and to integrate qualitative data from family perspectives on their experience with the Speak Now Camp for Adolescents Who Stutter ("Speak Now").

Research Questions

1. Does *Speak Now* reduce the negative impact of stuttering on the lives of adolescents who stutter?

2. Does *Speak Now* increase communicative self-efficacy for adolescents who stutter?

3. How do parents of children who stutter describe the experience of *Speak Now*?

We hypothesize that active participation in the *Speak Now* camp curriculum will lead to an increase in self-reported self-efficacy in speaking situations and a decrease in the impact of stuttering on adolescents' lives.

Description of the Program

Speak Now is a CBT-based, five-day intensive summer camp program for adolescents who stutter. The program was founded in 2014 by Kim Sabourin, MA-CCC-SLP, a board-certified specialist in fluency disorders, who continues to organize and oversee the program. The program ran from August 1, 2016 – August 5, 2016. Six graduate student clinicians in speech-language pathology provided both individual and group therapy to participants, all of which was CBT-based. The graduate student clinicians completed a three credit course in the management of fluency disorders and received an additional three hours of training on CBT prior to the program and received course credit for participating in *Speak Now*.

Each day *Speak Now campers* participated in group therapy activities, which included discussions, worksheets, and art activities as well as one-hour individual therapy sessions. Group activities focused on a different CBT-based theme each day: education, the vicious cycle of stuttering, experimenting with stuttering, and dealing with people who do not understand me. Each day also included team-building exercises, games, and sports. The individual therapy sessions, while primarily focused on CBT, were tailored to the individual needs of the child and for two of the participants included some practice of

previously learned fluency restructuring strategies. On the final day of *Speak Now*, parents and families participated in a group discussion with adolescents other than their own child. The program culminated in a talent show, in which all the participants did some sort of performance or public speaking.

Participants

Twelve children and adolescents ranging from 8 to 16 years old attended *Speak Now*. Participants were recruited through the Stuttering Foundation and the National Stuttering Association's websites, an advertisement on the Temple University summer program website, flyers, and referrals from speech-language pathologists in the Philadelphia area. All attendees had received a diagnosis of stuttering from a speech-language pathologist and all but one had received therapy in their school, privately, or at the Temple University Speech Language Hearing Center (TUSLHC). Of the attendees of *Speak Now*, one participant attended in both 2014 and 2015, and one attended in 2015.

CHAPTER 2
METHODOLOGY

Study Participants

The participant already reported in Williams (2015) was excluded from this study. One additional Speak Now participant was excluded due to a diagnosis of Autism Spectrum Disorder. Two individuals were not included, as follow-up data was not able to be collected. As such, this study includes nine *Speak Now* participants, six of whom were male. Demographic information is described in *Table 1*, below. Information on age at diagnosis of stuttering and history of prior treatment was obtained through a parent interview conducted prior to the beginning of *Speak Now*.

Table 1. Participant Information

Participant	Age	Gender	Age at Diagnosis of Stuttering	Prior Treatment for Stuttering
1	8	female	8	none
2	13	male	7	5 years
3	14	female	3	10 years
4	13	male	10	3 years
5	11	female	3	8 years
6	11	male	7	4 years
7	10	male	7	2 years
8	8	female	7	1 year
9	16	male	13	3 years

Data Collection

All baseline assessments were administered via telephone or video calls by graduate student clinicians before *Speak Now* began to determine baseline levels of self-efficacy surrounding communication situations and overall speaking-related attitudes. The same assessments were administered again via telephone call by graduate student clinicians at one- and four-months post treatment. In addition, a parent interview was conducted by a graduate student clinician at one- and four-months post treatment. The graduate student clinicians recorded these assessments onto a personal voice recorder. Names and other identifying information were not recorded.

Self-Efficacy Surrounding Communication Situations

The *Self-Efficacy for Adolescents Scale* (SEA-Scale), which uses a 10-point Likert Scale to rate how confident the adolescents feel as they enter various speaking situations, was administered at all data points. The SEA-Scale is an unpublished assessment presented at the 1994 ASHA convention (Manning, 1994). The SEA-Scale has been shown to differentiate children who stutter from typically fluent children (Manning, 2010). Bray and colleagues (2013) investigated adolescents' ability to use self-efficacy scales and recommended the use of self-efficacy scales such as the SEA-Scale in future research and as an outcome measure for treatment. The SEA-Scale includes 100 different speaking situations such as "talking with a group of friends as you have lunch at school." Adolescents rate their confidence in each situation on a ten-point scale with one indicating, "no way, I would be too uptight to speak," and ten indicating, "no problem, I would be

confident speaking.” Responses are averaged to get a score, with a higher score indicating a higher level of self-efficacy in communication situations.

Overall Speaking-Related Attitudes

The *Overall Assessment of the Speaker’s Experience of Stuttering for teenagers* (OASES-T) or the *Overall Assessment of the Speaker’s Experience of Stuttering for school-age children* (OASES-S) was administered at all data points, as indicated by the age of the participant (Yaruss & Quesal, 2010). Participants aged 8-12 were administered the OASES-S, while participants aged 13-16 were administered the OASES-T.

The OASES is designed to measure the overall impact of stuttering on a person’s life. Items are grouped into four sections, each modeled after the World Health Organization’s *International Classification of Functioning, Disability, and Health* (ICF; 2001). Section I, “General Information,” addresses the speaker’s perception of his stuttering, including self-ratings of speech naturalness, fluency, and knowledge of treatment and self-help options. Section II, “Your Reactions to Stuttering,” addresses the cognitive, affective, and behavioral reactions the speaker has to stuttering. Section III, “Communication in Daily Situations,” assesses the difficulties the speaker has communicating across a variety of situations. Finally, Section IV, “Quality of Life,” measures the negative impact of stuttering on a person’s life with satisfaction ratings of the speaker’s ability to communicate and the degree to which stuttering interferes with their relationships or ability to participate in life.

Scores on each subtest of the OASES as well as overall scores are used to determine an impact severity rating. Severity rating ranges are displayed in *Table 2* below.

Table 2. OASES Severity Ratings

Score Range	Severity Descriptor
1.0 – 1.49	mild
1.50 – 2.24	mild/moderate
2.25 – 2.99	moderate
3.0 – 3.74	moderate/severe
3.75 – 5.0	severe

Parent Interview

At one-month and four-month follow-ups, graduate student clinicians conducted a parent interview regarding parents' experience at camp. Suggested questions were provided (see Appendix A), but interviews were conversational and additional questions were asked as judged to be appropriate by the interviewing clinician. One parent interview was not able to be transcribed, and as such was excluded from analysis. To increase reliability, the following methods for analysis of the interviews were used based on Corcoran and Stewart (1998):

1. All interviews were tape-recorded and transcribed verbatim by the interviewer.
2. Investigators with differing backgrounds were used to reduce the likelihood of investigator-biases regarding the data. Before analyzing the interviews, the researchers addressed their personal and professional biases regarding stuttering and what findings might emerge from the interviews.

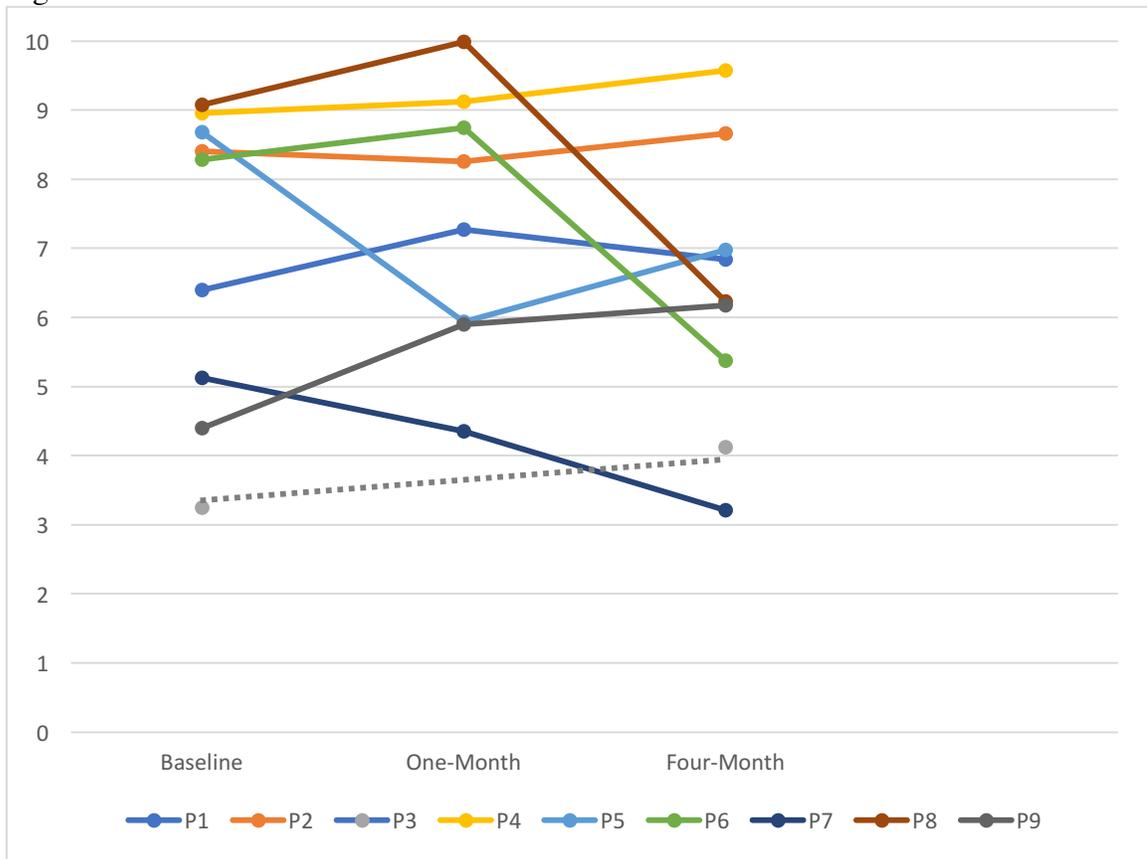
3. Investigator triangulation was used. Each investigator read the interview transcripts at least twice before identifying themes that emerged. Once the individual analyses were completed, the investigators compared their analyses and came to a consensus.

CHAPTER 3
RESULTS

Self-Efficacy Surrounding Communication Situations

The scores from each participant's SEA-Scale at baseline, one-, and four-months post-camp are displayed in *Figure 1*, below. One participant did not complete the SEA-Scale at one-month, and therefore this data point was excluded from analysis. For the eight participants who completed the SEA-Scale at baseline and one-month follow up, five reported an increase in confidence in speaking situations after camp. Three of these participants showed further improved confidence at four-month follow up. One showed a decrease to above baseline-level, and two dropped below baseline levels.

Figure 1. SEA-Scale Scores



A paired-samples t-test was conducted to compare the SEA-scale scores at baseline to scores at one-month and four-months post camp. There was no significant difference between the scores at baseline ($M = 7.41$, $SD = 1.84$) and the scores one-month following camp ($M = 7.45$, $SD = 1.92$); $t(7) = -0.064$, $p = 0.951$). When comparing scores for all of the participants included in the study, there was no statistically significant difference from baseline to four-months follow-up ($M = 6.35$, $SD = 2.01$); $t(7) = 1.27$, $p = 0.25$).

Overall Speaking-Related Attitudes

The overall impact scores on the OASES are compared in *Table 3*, below. Of the six participants for whom there was baseline and one-month follow up data recorded, five showed a drop in overall impact from baseline to one-month following camp. For three of these five, four-month follow up was lower than baseline. One participant showed a decrease in severity rating from moderate/severe to mild/moderate, which was maintained at four-month follow up.

Table 3. OASES Scores

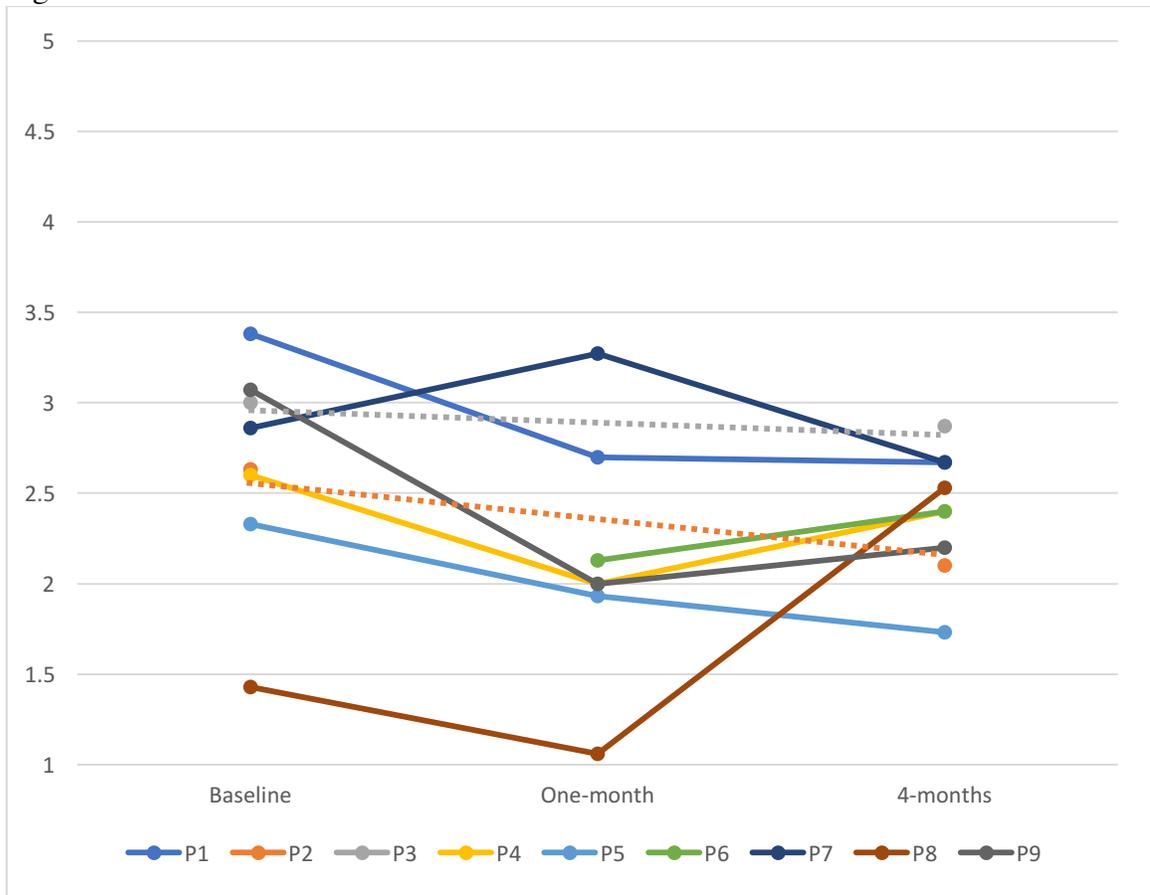
	Baseline OASES Score	Baseline Severity	One-Month Follow-up OASES score	One-Month Follow Up Severity	Four-Month Follow-Up OASES Score	Four-Month Follow-Up Severity
1	2.98	moderate	2.5	moderate	2.78	moderate
2	2.24	mild/moderate	--	--	1.79	mild/moderate
3	3.06	moderate/severe	--	--	3.31	moderate/severe
4	1.92	mild/moderate	1.5	mild/moderate	1.61	mild/moderate
5	1.93	mild/moderate	1.63	mild/moderate	1.42	mild
6	--	--	2.1	mild/moderate	2.11	mild/moderate
7	2.35	moderate	3.17	moderate/severe	2.52	moderate
8	1.29	mild	1.08	mild	1.68	mild/moderate
9	3.64	moderate/severe	2.14	mild/moderate	2.23	mild/moderate

A paired-samples t-test was conducted to compare scores on each subtest of the OASES at baseline to scores at one- and four-months post-camp.

Section I: General Information

The scores from each participant’s OASES Section I score at baseline, one-, and four-months post-camp are displayed in *Figure 2*, below. One participant did not complete the OASES at baseline. Two participants did not complete the OASES at one-month follow up. These data points were excluded. All but one participant experienced an initial drop in reported impact in *General Information*.

Figure 2. OASES Section I Scores



Changes in severity ratings are displayed in *Table 4*, below. Of the six participants for whom there was data at baseline and one-month follow up, five dropped in severity in the *General Information* subtest. For four of the five, this represented a decrease in severity rating. One participant had already received a rating of “mild” and therefore no decrease in severity was possible. Of these four participants who displayed a decrease in severity rating, three maintained the decrease at four-month follow up.

Table 4. OASES Section I Severity Ratings

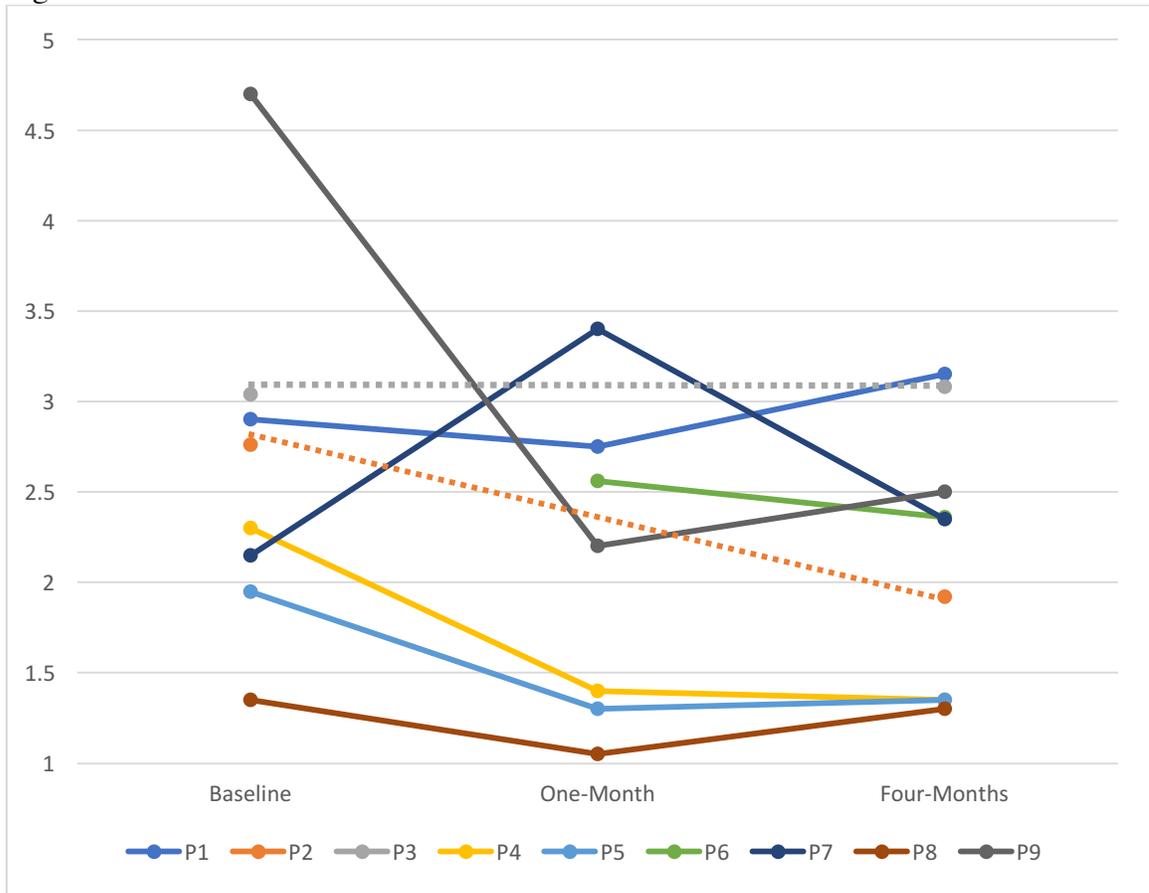
	Baseline OASES I Score	Baseline Severity	One-Month Follow-up OASES I score	One-Month Follow Up Severity	Four-Month Follow-Up OASES I Score	Four-Month Follow-Up Severity
1	3.38	moderate/severe	2.7	moderate	2.67	moderate
2	2.63	moderate	--	--	2.1	mild/moderate
3	3.0	moderate/severe	--	--	2.87	moderate
4	2.6	moderate	2.0	mild/moderate	2.4	moderate
5	2.33	moderate	1.93	mild/moderate	1.73	mild/moderate
6	--	--	2.13	mild/moderate	2.4	moderate
7	2.86	moderate	3.27	moderate/severe	2.67	moderate
8	1.43	mild	1.06	mild	2.53	mild/moderate
9	3.07	moderate/severe	2.0	mild/moderate	2.2	mild/moderate

Although a decrease was observed in severity scores on Section I of the OASES (M = 2.61, SD = 0.68) and one-month follow up (M = 2.16, SD = 0.75), this change did not reach statistical significance; $t(5) = 2.25$, $p = 0.074$. There was no statistically significant difference between scores on Section I of the OASES at baseline and four-months following camp (M = 2.40, SD = 0.37), $t(7) = 1.23$, $p = 0.26$.

Section II: Reactions to Stuttering

The scores from each participant's OASES Section II score at baseline, one-, and four-months post-camp are displayed in *Figure 3*, below. One participant did not complete the OASES at baseline. Two participants did not complete the OASES at one-month. These data points were excluded. All but one participant reported reduced impact of reactions to stuttering at one-month follow up.

Figure 3. OASES Section II Scores



Changes in severity ratings are displayed in *Table 5*, below. Of the six participants for whom there was data at baseline and one-month follow up, five dropped in severity in the *Reactions to Stuttering* subtest. For three of the five, this represented a decrease in severity rating. One participant had already received a rating of “mild” and therefore no decrease in severity was possible. Of these three participants who displayed a decrease in severity rating, all three maintained the decrease at four-month follow up.

Table 5. OASES Section II Severity Ratings

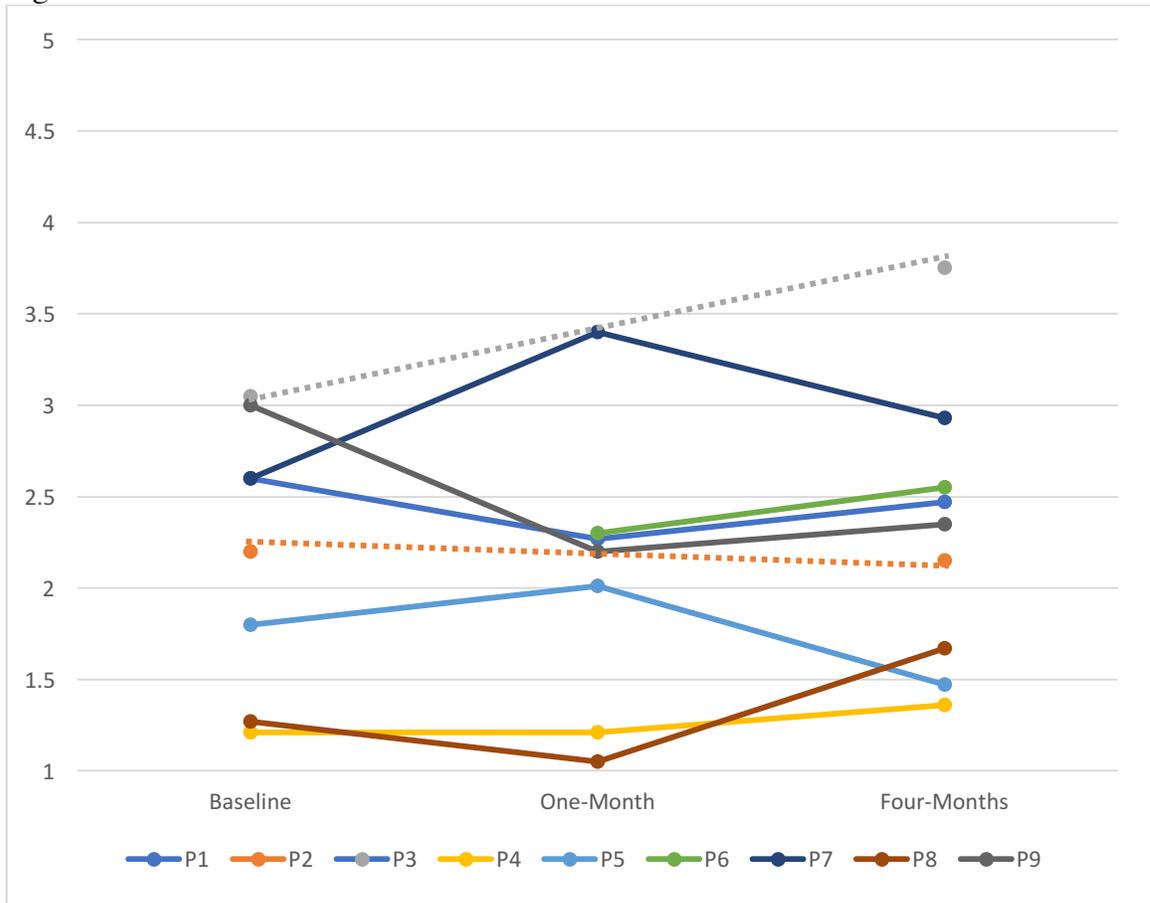
	Baseline OASES II Score	Baseline Severity	One-Month Follow-up OASES II score	One-Month Follow Up Severity	Four-Month Follow-Up OASES II Score	Four-Month Follow-Up Severity
1	2.9	moderate	2.75	moderate	3.15	moderate/severe
2	2.76	moderate	--	--	1.92	mild/moderate
3	3.04	moderate/severe	--	--	3.08	moderate/severe
4	2.3	moderate	1.4	mild	1.35	mild
5	1.95	mild/moderate	1.3	mild	1.35	mild
6	--	--	2.56	moderate	2.36	moderate
7	2.15	mild/moderate	3.4	moderate/severe	2.35	moderate
8	1.35	mild	1.05	mild	1.3	mild
9	4.7	severe	2.2	mild/moderate	2.5	moderate

There was no significant difference between scores on Section II of the OASES at baseline ($M = 2.55$, $SD = 1.16$) and one-month following camp ($M = 2.01$, $SD = 0.92$), $t(5) = 1.09$, $p = 0.07$. There was no significant difference between scores on Section II of the OASES at baseline and four-months following camp ($M = 2.13$, $SD = 0.76$), $t(7) = 1.78$, $p = 0.12$.

Section III: Daily Communication

The scores from each participant’s OASES Section III score at baseline, one-, and four-months post-camp are displayed in *Figure 4*, below. One participant did not complete the OASES at baseline. Two participants did not complete the OASES at one-month. These data points were excluded.

Figure 4. OASES Section II Scores



Changes in severity ratings are displayed in *Table 6*, below. Of the six participants for whom there was data at baseline and one-month follow up, three dropped in severity in the *Daily Communication* subtest. For one of the three, this represented a decrease in severity rating.

Table 6: OASES Section III Severity Ratings

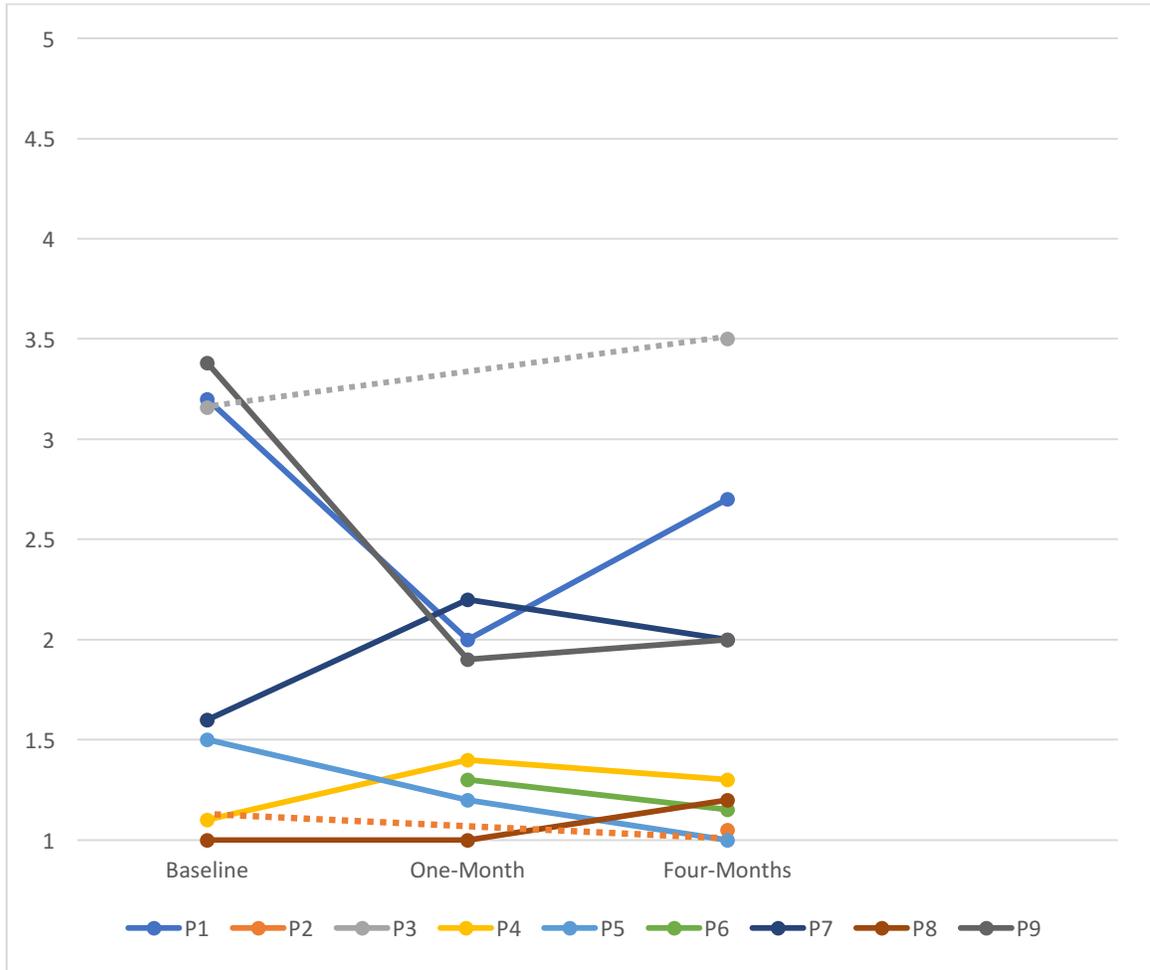
	Baseline OASES III Score	Baseline Severity	One-Month Follow-up OASES III score	One-Month Follow Up Severity	Four-Month Follow-Up OASES III Score	Four-Month Follow-Up Severity
1	2.6	moderate	2.27	moderate	2.47	moderate
2	2.2	mild/moderate	--	--	2.15	mild/moderate
3	3.05	moderate/severe	--	--	3.75	severe
4	1.21	mild	1.21	mild	1.36	mild/moderate
5	1.8	mild/moderate	2.01	mild/moderate	1.47	mild/moderate
6	--	--	2.3	moderate	2.55	moderate
7	2.6	moderate	3.4	moderate/severe	2.93	moderate
8	1.27	mild	1.2	mild	1.2	mild
9	3.0	moderate/severe	2.43	moderate	2.0	mild/moderate

There was no significant difference between scores on Section III of the *OASES* at baseline ($M = 2.08$, $SD = 0.76$) and one-month following camp ($M = 2.09$, $SD = 0.83$), $t(5) = -0.03$, $p = 0.33$. There was no significant difference between scores on Section III of the *OASES* at baseline and four-months following camp ($M = 2.27$, $SD = 0.80$), $t(7) = -0.34$, $p = 0.74$.

Section IV: Overall Quality of Life

The scores from each participant's *OASES* Section III score at baseline, one-, and four-months post-camp are displayed in *Figure 5*, below. One participant did not complete the *OASES* at baseline. Two participants did not complete the *OASES* at one-month. These data points were excluded.

Figure 5. OASES Section IV Scores



Changes in severity ratings are displayed in *Table 7* below. Of the six participants for whom there was data at baseline and one-month follow up, three dropped in severity in the *Overall Quality of Life* subtest. For all three, this represented a decrease in severity rating. Two participants had already received a rating of “mild” and therefore no decrease in severity was possible. Of these three participants who displayed a decrease in severity rating, all three maintained the drop at four-month follow up.

Table 7. OASES Section IV Severity Ratings

	Baseline OASES IV Score	Baseline Severity	One-Month Follow-up OASES IV score	One-Month Follow Up Severity	Four-Month Follow-Up OASES IV Score	Four-Month Follow-Up Severity
1	3.2	moderate/severe	2	mild/moderate	2.7	moderate
2	1.6	mild/moderate	--	--	1.05	mild
3	3.16	moderate/severe	--	--	3.5	moderate/severe
4	1.1	mild	1.4	mild	1.3	mild
5	1.5	mild/moderate	1.2	mild	1.0	mild
6	--	--	1.3	mild	1.15	mild
7	1.6	mild/moderate	2.2	mild/moderate	2.0	mild/moderate
8	1.0	mild	1.0	mild	1.2	mild
9	3.38	moderate/severe	1.9	mild/moderate	2.0	mild/moderate

There was no significant difference between scores on Section IV of the *OASES* at baseline ($M = 1.96$, $SD = 1.05$) and one-month following camp ($M = 1.62$, $SD = 0.48$), $t(5) = 1.02$, $p = 0.97$. There was no significant difference between scores on Section IV of the *OASES* at baseline and four-months following camp ($M = 1.84$, $SD = 0.89$), $t(7) = 1.03$, $p = 0.34$.

Parent Interviews

Eight parent interviews from one-month and four-month were analyzed using phenomenological analysis. Six consistent themes emerged from parent interviews, discussed in depth below with a selection of representative quotes for each theme.

1. Campers benefitted from peer engagement with other children who stutter.

All the parents discussed the benefit of being around other CWS for their child. Some parents expressed that this was the first time their child had been able to spend time with other kids who stutter as opposed to receiving individual therapy for stuttering; others noted the benefit of the small group versus a large group as part of a conference or workshop. Parents also expressed that it helped their child feel more normal.

P01 [There's] a big difference this year. Like I said because of that camp. Because she saw other children experiencing the same speech difficulties that she has.

P03 The social element is so critical especially when you have a child who is the only stutterer in their school and they don't know anyone else and they stand out and they're different. It's such an important thing.

P03 The thing that was different about camp is that it was such a remarkable experience because there's so much of a social component to it with other people where you can be yourself and feel like yourself without any repercussions. It's like a false world that's not really out there. But for that one week, you come away from it a changed person. It's almost like if you're in a car and you're on a long trip, and you have to fuel up. That's where they go to fuel up. It feeds your need to feel normal. It lets you know that there are other people out there, and they're doing interesting things.

P03 The first day she went, the first thing she said, was "my god, I felt normal for the first time."

P04 The experience of being with others kids who stuttered gave him more confidence and meeting other kids since he didn't know anyone else that stuttered.

P07 Going to that camp and being around a community of other children who had the same experiences was an instant bonding for him.

P07 On his last day, as we were leaving he started crying. I asked him why, and he said, “because I don’t want it to end.” I asked him, “what was so special about all of those kids?” He said, “I just felt so comfortable with them – I understood them, and they understood me.”

P07 The variety of different kids of all different backgrounds that may never have come into contact with each other until they did this camp. And as soon as they did this camp, because they had such a powerful, common experience with their speech, all of a sudden, these kids accepted each other regardless. We thought that was really neat for him to be part of—that this bond was so strong, just after spending a week together with these kids.

P09 It was just really a constructive, good for him to be in that environment and see other people have similar issues and they’re dealing with it.

P04 Being exposed to other children with it; I believe it does it make you feel better that you’re not the only kid.

2. Campers were anxious before starting and at the beginning of camp.

Three of the parents reported that their children were nervous or did not want to attend camp before it started or after the first day. Some parents attributed this to nervousness in speaking situations, while others attributed it to the new CBT-based methods used at camp.

P07 He was very hesitant the first day of camp—he was very nervous that he wouldn’t know anybody, and how would the other campers treat him—and then by the end of the week he absolutely loved it.

P01 She was nervous. You know, in fact that first morning she started saying that she didn't feel well. And I started to keep her home, but then I felt like it was nerves, and I told her, I said 'look if you still don't feel well,' she had a cellphone with her in her bag; I said, 'you just call me and I'll be right there back there to pick you up.' But I said 'just go.' And you know she never called and when I picked her up that day she was a whole different person I think she realized it was just nerves.

P09 It was a little different. He wasn't used to the technique that they used. The first day he was really upset and didn't want to go back. They tried to force him to stutter... So I told him it's only a week, give it a chance. And he was glad he listened to me.

3. Parents benefitted from the experience of interacting with other parents of children who stutter.

Five of the parents noted benefits from being around other parents and families of CWS. The parents reported finding comfort and support in talking to other people going through what they are going through.

P01 It was just so rewarding to see the other families going through the same thing, and a lot of the parents I met, their kids were older, and they had been dealing with this a lot longer than we have. And it's just a – I don't want to say a way of life but you know there's different people that make up the word and everyone has something. And it just made me feel that [my granddaughter] is going to be ok.

P02 So we were in a setting where there were other parents there too, so I heard them share their concerns and their fears and things of that nature. That was really

helpful to know that there's other parents out there who are going through the same stuff as us.

P03 It was great to hear families who were at different stages...It was helpful because we could share with each other.

P03 Because it was the first time we could sit with other people, people who love the people who stuttering, and our hearts were breaking for these kids to see them so happy.

P07 For the whole family, especially the last day, it was a great bonding experience for the family. And getting to meet other parents who were dealing with the same issues, and meeting all these other kids whom [my son] had talked about the whole week.

P09 I know I had [gained something]. I felt like well you know I'm not the only parent you know having a hard time dealing with this or you know who has a child you know dealing with this and is struggling.

4. Parents benefitted from hearing the thoughts and feelings of other children who stutter.

Three parents noted that it was helpful meeting and speaking to other CWS. On the last day of camp, parents participated in a group therapy session with other CWS, which they refer to below:

P04 I went there, so I found it very helpful. The small groups that we were in and it was nice to hear from some other children that stuttered other than my son.

P03 The kids left me breathless, and I asked them a lot of questions “how do you do this or that?” and it’s great to tell them that they’re so brave and that they can battle these boundaries with their teachers and friends.

P03 It was such a life changing experience for my husband and I to see these kids at different stages. Some are at beginning of journey and some have been dealing with it like [my daughter], and it’s absolutely amazing how each child has come up with variation with how to handle it in school, with family members, with strangers.

P03 I was curious about how other parents in the other group and I missed meeting the other kids at camp because I really learned a lot. They are walking books of knowledge. They teach me so much more and I wish I could’ve met them. I treasured that day.

P07 On the last day we met in a group with some other campers—other than [my son]—and heard their thoughts about stuttering. It was emotional for us because the message that all the kids kept saying was that they’re just normal kids. They don’t want their parents to focus so much on their speech—they just want to be a regular kid and enjoy their life. It made us realize how much emphasis we’re putting on the speech aspect of it.

P07 Meeting some of the other parents at the camp, and speaking with some of the other campers—it opened up our eyes and made us think, ‘maybe we need to ask him what he prefers or what he’s comfortable with.’

5. The parents observed an increase in confidence and relaxation for their children in speaking situations following camp.

All eight of the parents reported that their child was more confident or more relaxed in speaking situations following the week of camp. Some parents reported their child was more willing to take risks with speaking or is entering speaking situations they previously would not.

P01 She felt comfortable. They taught her different techniques too...and it has been helping her relax. In fact, one of her classmates the parents or somebody in the school, I forget, my daughter told me this, they say they see a major improvement in the way [my granddaughter] is communicating this year, and I think it's because of the camp. I know it's because of the camp.

P01 I see a lot more. I see that she's not as frustrated as she was last year. And it's because of the camp. Really. It's because of the camp. Because last year – you know this is my grandchild my heart breaks for any type of you know people teasing her or whatever I don't want that. I see that she's a lot more comfortable in her own skin this year than she was last year.

P01 I just see her confidence has grown, and it just makes me so proud of her that she's not shrinking in the background, not wanting to speak.

P02 But what I also noted about him more so now is that [my son] is very comfortable talking now and more confident with the stutter.

P02 He knows he stutters and he's like "I stutter and I'm proud" kind of attitude. [laughs]. So I think he has a little of confidence now with his stutter. And he knows that he tries to fix it and he's just more comfortable.

P03 It gave her the feeling of potential. She got to work with graduate students who are engaged in this professional way not only in studies but with students.

When you stutter and you think you can't go to college or get a job, it instills potential in them and that did amazing things for her self-esteem and goal setting... that she could believe she could do anything.

P03 She's got a beat on her future after high school now. We talk about college like, you're going to college. She's going or she's working full time and it wasn't real for her until she went to camp. She can now see she has a future in college, taking courses that will help her get a job and traveling the world. It opens so many doors that she didn't have the ability to see going in. It changed her outlook on everything.

P04 I think he's pretty confident. He does talk...and teachers tell me he participates in class. He's not afraid to speak up,

P07 It was such a powerful bonding experience, and I think because of that, he let his guard down a little bit. He began to see that those kids were interesting and smart and athletic, and he transferred that to himself, and realized that he has those qualities too—and that maybe he doesn't have to be so guarded all the time.

P07 Two weeks after the camp, we were out at the sporting goods store shopping for cleats for the baseball season, and he was doing some of his strategies in the store. Prior to that, he would never have done that—he would have been afraid that people would overhear him, or would have thought that he was speaking weird. But he let his guard down, and it was so refreshing and exciting for me to see that—that it's finally started to sink in for him—that there was that transfer from the camp to a real-life setting.

P07 My husband and I both noticed that this was the first time that [my son] ever had to get up in front of a group of people and perform, and he wasn't nervous. Usually prior to this—if it was a speech, or he had to do something in front of a group of people at school—the night before it was a lot of tears and anxiety. But he was truly looking forward to the talent show—there wasn't an ounce of nervousness. It was wonderful for us to see that side of him.

P01 She is willing to talk more and her teacher said that she is more willing to talk. So that's a good thing.

P09 I noticed that he's more confident. I'm not saying that he's where he should be; it's still a work in progress.

P05 She's participating in class and I think overall [stuttering] is not really having an effect on her.

6. Parents learned about stuttering and how to help their child from camp.

Four of the parents reported that they learned new information regarding stuttering or strategies to help their children at camp.

P01 We learned how to help with [my granddaughter's] frustration when she can't get her words out. It just taught us how to relate to her without making her uncomfortable or losing patience or help sort of be a little more patient when she found herself stuttering over words or you know unable to get the words up.

P01 I learned a lot really, because I had never really had to deal with someone close to me you know that stuttered so you know it taught me different ways to help the person relax to just you know just you know just not shut down when they couldn't get the words out. And like I said it taught me patience with it and not to

try to say the words for her or you know to know some of the triggers or you know I think they called them sparkers or something. Like you know people that stutter sometimes blink their eyes or lick their lips or do those little things that I know that when I see her doing those types of those things I know that she's having a problem communicating and I can just relax a little bit, you know what I'm saying? And help her to relax a little bit.

P02 Kim [the director of the camp], see, she had a lot of information just about techniques and things of that nature about stuttering and how we can help our kids. So I think it was extremely beneficial that little session that Kim had. I think there was a lot of good information that was presented there.

P07 [A graduate student clinician] told me that I should always make eye contact with people—even if it takes me a long time, I should hold my eye contact. If you look away, it makes it harder for me to look at you. So I want you to keep looking at me, even if I'm disfluent. Before, I really never knew what to do when he was struggling.

P09 There are resources out there, things to help children especially with self-esteem so I think it was helpful. I had never known it existed or else I would have been taking advantage of it.

CHAPTER 4

DISCUSSION

The primary purpose of this study was to assess the efficacy of a five-day intensive CBT-based summer camp for adolescents who stutter in improving communicative self-efficacy and reducing the impact of stuttering. It was predicted that attending *Speak Now* would lead to an increase in self-efficacy in communication situations as measured the SEA-Scale and a reduction in the impact of stuttering as measured by the OASES. Phenomenological analysis was performed of parent interviews regarding their child's experience at camp to determine what themes emerged.

Although scores decreased in the sections of the OASES that measured general knowledge, reactions to stuttering, and overall quality of life, these results did not reach statistical significance. One possible explanation for this lack of statistical significance across measures is that the study was limited by a small sample size, which makes it more difficult to detect effects. In addition, the study size had a large degree of variation in current age, age at diagnosis of stuttering, history of therapy prior to camp, and therapy received after camp that could not be controlled for due to the small sample size. Furthermore, collection of follow-up data at one-month coincided with the time when the participants were just returning to school. It is possible that this time of year may have been difficult for adolescents and impacted results. Group effects may also have been minimized by one camper, participant 8, who received mild severity ratings on all sections of the OASES at baseline. This participant could not decrease in severity, as she was already at the lowest possible level. This participant was returning to *Speak Now* for the second

summer and had received weekly CBT-based individual speech therapy sessions during the school year.

More participants experienced a decrease in scores on sections I and II of the OASES, which measure general information and reactions to stuttering, as compared to sections I and IV which measure the impact of stuttering on daily communication and overall quality of life. As the camp's focus was on making cognitive and affective changes, it may be that the participants required a longer period of time to practice these new patterns of thinking to experience a reduction of impact in these areas.

As seen on *Table 3-A* and *Table 4-A*, all but one participant reported a reduction in the impact of stuttering in the areas of general information and reactions to stuttering. Although these results did not reach statistical significance, this trend warrants future research. Similarly, while there was no statistically significant change in the overall average scores in the self-reported ratings of confidence in speaking situations on the SEA-Scale, there did seem to be an increase in confidence scores compared to baseline at one-month for 5 out of 9 participants and an increase in confidence over baseline for 4 out of 9 participants at four-month follow up. As such, it does appear that for some children, participation in an intensive one-week program like *Speak Now* does lead to some reduction of the impact of stuttering as well as an increase in confidence.

Future research should focus on determining the factors that predict which children respond positively to programs like *Speak Now*. As not all participants showed change following camp and some showed change but did not maintain the change, this study suggests that programs like *Speak Now* could serve as a supplement to more long-term treatment rather than an alternative service delivery model. Future research should focus

on the effects of combining an intensive short-term program like Speak Now with long-term CBT-based therapy.

Although quantitative methods failed to show any statistically significant effects of Speak Now, phenomenological analysis of parent interviews revealed six themes:

1. Campers benefitted from peer engagement with other children who stutter.
2. Campers were anxious before starting camp.
3. Parents benefitted from the experience of interacting with other parents of children who stutter
4. Parents benefitted from hearing the thoughts and feelings of other children who stutter.
5. The parents observed an increase in confidence and relaxation for their children in speaking situations following camp.
6. Parents learned about stuttering and how to help their child from camp.

These themes suggest that clinicians who are working with adolescents who stutter should consider a group therapy model that involves the families. Although all the adolescents had previously received speech therapy for stuttering, many parents reported their child had never met another child or adolescent who stutters prior to coming to camp. Furthermore, parents reported benefitting from direct instruction on how to best support their child and from interacting with other parents and children who stutter.

This study had several limitations that must be taken into consideration when interpreting the results. The first is that parents may have been compelled to speak highly of the camp as they were speaking to graduate students who attend Temple University and therefore are affiliated with the camp. In the future, researchers might use a neutral

interviewer to eliminate this possibility for bias. Future research might also include ethnographic interviews with the adolescents themselves to determine if their perceptions of camp matched those of their parents. This study may have been influenced by a response bias, as all participants in Speak Now were not able to be scheduled for follow-up interviews and data collection. Furthermore, no control group was included in this study to compare adolescents who attended camp and adolescents who did not. It is possible that with a control group, there may have been effects of camp that were not able to be determined given the current research design.

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APPENDIX
PARENT INTERVIEW QUESTIONS

One-month follow-up

What was it like for _____ to go to camp for the first time?

Did you (or spouse//family) gain something from it as well?

Did you or your child learn anything new about stuttering or stuttering treatment?

Does _____ have thoughts about his/her personal speech goals?

Following camp, were you able to have some conversations with him/her that you hadn't had before?

Four-month follow-up

How have things been going for your child since camp?

Has your child been receiving any speech therapy since camp?

Does your child have any new goals for their speech?

Have you noticed any changes when it comes to talking (i.e., willingness to talk, level of participation, confidence or any other)?

Would you like to have your child attend again this summer?