THE PERCEPTIONS OF ADOLESCENTS WHO STUTTER REGARDING COMMUNICATION WITH THEIR PARENTS

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ABSTRACT

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This study used a mixed methods approach to explore the perceptions of adolescents who stutter (AWS) between the ages of 12 and 17 related to communication with parents and other significant people about stuttering. In addition, this study sought to better understand the relationship between general communication levels between AWS and their parents and how general communication was related to discussing stuttering. Participants took part in a semi-structured interview and completed the Communication about Stuttering Inventory (CASI) and the Parent-Adolescent Communication Scale (PACS). Responses to these two questionnaires were used to supplement the thematic analysis for participants. Findings from the interviews revealed four major themes and ten minor themes. Major themes consisted of (1) discussions with parents; (2) decisions about speech therapy; (3) types of parental assistance; and (4) discussions with others. Minor themes were (1) preference to talk with mothers; (2) speech techniques and general information; (3) parents’ idea to begin speech therapy or participants’ idea to begin speech therapy; (5) reminding to use techniques and providing advice; (6) practicing speech techniques together; (7) good listening skills and not interrupting; (8) not directly talked about with friends; (9) rarely discussed with siblings; and (10) sharing experiences with other family members who stutter. Group comparisons between mothers and fathers revealed that participants communicated more with mothers about stuttering versus fathers. In addition, open communication levels were related to levels of communication about stuttering among both mothers and fathers.
This study is dedicated to individuals who stutter and their parents, families, and friends.
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CHAPTER I.
INTRODUCTION

Stuttering is a communication disorder that has the potential to impact various aspects of a person’s life. Despite the abundance of research that has been devoted to children and adults who stutter, there is little research that describes the experiences of adolescents who stutter (AWS) (Schwartz, 1993). Much of the literature on AWS appears to consist of anecdotal evidence, such as clinical suggestions and recommendations.

In contrast to the lack of research regarding AWS, there is a large quantity of literature devoted to the impact that parents have on stuttering. Historically, parents of children who stutter (CWS) have been viewed as extremely influential on the development of stuttering. In fact, parents of CWS were seen as so influential that at one time researchers and clinicians believed parents were essentially causing their children to stutter (Johnson, 1942; Johnson and Associates, 1959; Johnson, 1961: Nippold & Rudzinski, 1995). This belief was motivated by the Diagnosogenic theory proposed by Johnson (1942), which stated that parents of CWS were misdiagnosing normal disfluencies as stuttering behaviors and communicating to their children, in a variety of ways, that stuttering was unacceptable. Because of the influence of the Diagnosogenic theory, parents of CWS were explored from multiple perspectives with one of these perspectives being communication patterns of parents of CWS (Nippold & Rudzinski, 1995). Although there have been many studies that have examined the communication patterns of parents and CWS, there is little research that explores the communication between AWS and their parents. To date, research exploring the characteristics of parents is more plentiful, with AWS receiving very little attention by comparison.
How individuals communicate about stuttering with others, specifically their parents, has been explored sporadically in the stuttering literature. In the past, it can be argued that parents of CWS did not communicate about stuttering. Clinicians took the position of recommending that parents not discuss stuttering openly with their child for fear of exacerbating the problem (Johnson, 1942; Johnson, 1961). In contrast, many therapy programs today include the acknowledgement of stuttering moments as well as fluent speech production (Onslow & Packman, 1999). Furthermore, clinicians have recommended that parents talk with their children about their attitudes and feelings related to stuttering (Logan & Yaruss, 1998).

Although communication about stuttering has been discussed throughout the stuttering literature, there is very little research that has explored levels of communication between AWS and parents. Therefore, the following section will review the available literature related to parents of individuals who stutter, adolescents who stutter, and parent-adolescent communication. For the purpose of organization, the literature review will be divided into different sections that include (1) literature related to the influence of parents on stuttering development; (2) a review of research on adolescents who stutter, (3) the importance of parent-adolescent communication, (4) parent-adolescent communication about stuttering, and finally, (5) a proposed study that investigates the experiences of AWS regarding their communication with their parents.
CHAPTER II.

LITERATURE REVIEW

The Influence of Parents on the Development of Stuttering

Parental influence on the development and treatment of stuttering has generated significant interest ever since the emergence of the Diagnosogenic (Semantogenic) theory of stuttering (Johnson, 1942). Since the 1940’s, researchers have examined parents of children who stutter (CWS) from multiple perspectives to determine if parents of CWS were any different than parents of children who do not stutter (CWDNS), and whether parental behaviors had an influence on the development of stuttering (Nippold & Rudzinski, 1995). Also, parents of CWS have been the focus of studies of the home environment of CWS (Yairi, 1997)

Parents of CWS are believed to have an important role in the therapy process. This is apparent through the development of stuttering therapy programs to treat stuttering in young children. Parental involvement in stuttering therapy can be observed in classic examples such as The Lidcombe Program (Onslow & Packman, 1999) and Parent-Child Interaction Therapy (Botterill & Kelman, 2010). Along with these programs, other researchers and authors have encouraged parental involvement in the treatment of stuttering (Guitar, 2006; Kelly 1995; Rustin & Cook, 1995; Zebrowski & Schum, 1993).

Nippold and Rudzinski (1995) provide an extensive review regarding the influence of parents on the development of stuttering. These researchers focus on the speech of parents of CWS as a variable in stuttering development. In addition, Nippold and Rudzinski provide background regarding the motivation to study parental speaking behaviors by discussing studies that tested the Diagnosogenic theory. In terms of studies that investigated the speech of parents of CWS, Nippold and Rudzinski took a chronological approach to reviewing this research and
evaluated the findings from the 1970’s to the time of their publication in the mid 1990’s. The following sections will highlight and discuss further some of the studies that can be found in the Nippold and Rudzinski review.

*Early Studies Regarding the Influence of Parents on Stuttering*

Wendell Johnson’s Diagnosogenic theory is regarded by many as having a significant influence on the study of parents of CWS (Guitar, 2006; Nippold & Rudzinski, 1995; Packman & Attanasio, 2004; Yairi, 1997). In his theory, Johnson (1942) suggested that stuttering develops from parents mislabeling normal speech disfluencies as stuttering behaviors. As a result, this misdiagnosis of stuttering by parents leads the child to struggle and avoid “normal” speech disfluences, thus resulting in stuttering behaviors. The reactions that parents have towards stuttering, as well the child’s own reactions to his speech, lead the child to develop other behaviors in an attempt to avoid normal speech disfluencies (Nippold & Rudzinski, 1995). Furthermore, Bloodstein, Jaeger, and Tureen (1952) indicated that the Diagnosogèneic theory consisted of three assumptions, which they wrote were as follows:

1. Most normal young children speak with a considerable amount of repetition and other breaks in fluency.
2. Adults differ in their standards of fluency, and some react to the hesitant speech of children with unusual intolerance.
3. Children who are penalized for normal nonfluencies are likely to develop stuttering. (Bloodstein, Jaeger, & Tureen, 1952, p. 309)

Prior to the formal development of his theory, Johnson wrote about the role of evaluation in the development of stuttering (Johnson, 1938) and how reactions to a problem, especially stuttering, can contribute to the development of stuttering behaviors. At the time of this writing, Johnson (1938) discussed evaluations as being positive or negative in nature. Johnson proposed that if the child’s speech was evaluated in a negative manner, than the child would react
negatively to their speech. According to Johnson (1938), these negative reactions could take many forms, from stopping speech altogether (tension and struggle) to modifying the speech disturbance.

Johnson (1938; 1942) was not the first researcher to write about the influence that parents and the reactions of others have on the development of stuttering. As Packman and Attanasio (2004) point out, prior to Johnson’s initial writings on the topic, Charles Bluemel (1932) wrote about “primary and “secondary” stuttering. According to Bluemel (1932), “primary” stuttering consisted of the actual disturbance in the forward flow of speech, such as repetitions and sound prolongations. In terms of “secondary” stuttering, Bluemel wrote that the speaker becomes aware of the speech disturbance, introducing tension, struggle, and emotional reactions when these disturbances occurred. Furthermore, he stated that secondary stuttering can develop if a child is made aware of their stuttering. Finally, he described secondary stuttering resulting from punishing the speech disturbances and from communicating these disturbances as inappropriate (Bluemel, 1932). Taking this work into consideration, it appears that the writings of Bluemel (1932) had an influence in the creation of Johnson’s Diagnosogenic theory of stuttering (Packman & Attanasio, 2004).

During the early discussion of the Diagnosogenic theory, Johnson appeared to be persistent in his belief regarding the validity of his theory. This confidence may be partially attributed to the findings of a master’s thesis (Tudor, 1939 as cited in Silverman) that Johnson directed at the University of Iowa (Silverman, 1988). Silverman (1988) conducted a review of this unpublished master’s thesis, commonly referred to as “The Monster Study” by those who were aware of the thesis, and indicated that the findings revealed that requesting CWDNS to monitor their speech could make CWDNS more disfluent, which in turn could potentially lead to
stuttering behaviors (Tudor, 1939 as cited in Silverman, 1988). The results from the “Monster”
study were never published. Silverman speculated that the results were never published due to
Johnson possibly becoming embarrassed by the results and believing there was enough evidence
in support of his already publically accepted theory of stuttering to not publish the results.

The following years saw Johnson advocating for continued research investigating the role
of parents in the development of stuttering, as well as continued writings by Johnson in support
of the Diagnosogenic theory (Johnson, 1949; 1961; Johnson and Associates, 1959). This
recommendation for continued research can be observed in a 1942 article by Johnson in which
he wrote:

This study of the onset and development of stuttering in young children suggest the
advisability of intensive investigation of the apparent probability that stuttering in its
serious forms develops after the diagnosis rather than before and is a consequence of the
diagnosis. (Johnson, 1942, p. 257)

Many researchers complied with this recommendation and continued to investigate the
Diagnosogenic theory of stuttering into the 1950’s and 1960’s (Nippold & Rudzinski, 1995).

Parental Diagnosis of Stuttering and Characteristics

Nippold and Rudzinski (1995) point out several methods that were used to test Johnson’s
hypothesis, one of which was to determine if parents of CWS were different when compared to
parents of CWDNS. Nippold and Rudzinski state that some of these earlier studies attempted to
answer this question by investigating such variables as parental attitudes, personality
characteristics, and parents’ diagnosis of stuttering behaviors in their children. In one of the
earlier studies of parents, Moncur (1952) investigated the presence of parental domination in
parents of CWS. Mothers of 48 CWS were compared to controls to determine if there were
differences in parental domination characteristics. These domination characteristics were
classified as disciplinary action, holding excessively high standards for their child, “over-
supervision” and “over-protection,” and excessive criticism. All data was collected through personal interviews. Findings revealed that parents of CWS demonstrated more parental domination characteristics when compared to controls. Although Moncur (1952) indicated that many of the items were not statistically significant, he describes an overall pattern that suggests increased parental domination on the part of mothers of CWS. In addition, these findings support, to some extent, Johnson’s Diagnosogenic theory of stuttering suggesting that CWS are exposed to more adverse environmental conditions when compared to CWDNS (Moncur, 1952).

In that same year, Bloodstein, Jaeger, and Tureen (1952) examined whether parents of CWS would diagnose stuttering more frequently when compared to parents of CWDNS. Furthermore, Bloodstein et al. (1952) indicated that their study was designed to also test, to some degree, the validity of the Diagnosogenic theory. Participants consisted of 24 parents (12 couples) of CWS matched with 24 parents in a control group. Parents of CWS had children who ranged from three and a half to eight years of age. The control group had children who ranged in age from four to 10. Both groups were instructed to listen to recorded speech samples of six CWS and six CWDNS. After listening to the audio samples, participants were asked to determine if the speech samples contained stuttered or fluent speech. The results indicated that parents of CWS significantly diagnosed stuttering in CWS and CWDNS more than parents of CWDNS. Furthermore, as a whole, mothers and fathers scored similarly regarding their diagnoses of stuttering. These findings provided support for Johnson’s Diagnosogenic theory of stuttering (Bloodstein et al., 1952).

In addition to Bloodstein et al. (1952), other researchers have explored parental diagnosis of stuttering. For example, Glasner and Rosenthal (1957) examined how parents diagnose stuttering further by exploring the criteria used by parents to determine the existence of
stuttering. In addition, Glasner and Rosenthal (1957) investigated the incidence of parental diagnosis of stuttering, what parents believe causes stuttering, and the effect of parental intervention for their child who stutters. In order to answer these questions, Glasner and Rosenthal (1957) interviewed 996 parents of children entering the first grade. During the interview process, the researchers recorded and categorized participant’s responses. Of the 996 parents interviewed, about 15% (153 parents) indicated their child had stuttered at some point. The results from the interviews revealed that a high frequency of repetitions was associated with parents labeling the behavior as stuttering. In addition, 70% of parents who labeled their child as “stuttering” provided some form of intervention to correct stuttering. In terms of attributing a cause to their child’s stuttering, parents were more likely to correct stuttering if they believed it was caused by an emotional reaction. Glasner and Rosenthal (1957) stated that 41% of children did not continue to stutter when emotional disturbances were attributed to causing the stuttering. During their concluding remarks, Glasner and Rosenthal (1957) indicated that their findings did not support Johnson’s theory as they wrote “… that the Diagnosogenic theory of stuttering is an oversimplification of the problem and that in most cases the parents’ diagnosis and subsequent reaction is only part of the problem (Glasner and Rosenthal, 1957, p. 295).”

Shortly after Glasner and Rosenthal’s (1957) findings, Berlin (1960) also investigated parental diagnoses of stuttering to determine if parents were more intolerant of stuttering behaviors than control groups. In total, 210 participants were recruited for the study that comprised 67 parents of CWS, 57 parents of CWDNS, and 86 parents of children with articulation disorders. Berlin (1960) used a similar methodology to that of Bloodstein et al.’s (1952) use of speech samples with stuttered and fluent speech with some variation. In Berlin’s study, the label “stuttering” was avoided for one condition to determine if the label alone may
have an effect on participants’ judgments of the speech samples. In addition, participants were asked to further elaborate on their rationale for their diagnoses of stuttering in the speech samples. Berlin concluded that using the word “stuttering” in the instructions significantly influenced participants’ judgments of stuttering in the speech samples. In addition, Berlin stated that parents of CWS were no different than parents of CWDNS when judging disfluencies.

Along with investigating parental diagnosis of stuttering, the attitudes of parents of CWS have also been examined. Darley (1955), for example, explored the adjustment patterns and attitudes of 50 parents of CWS compared to equally matched controls. Participants were asked to complete an exhaustive questionnaire (846 questions) that was partially conducted during personal interviews. Results suggested that, as a whole, parents of CWS were similar in many ways to parents of CWDNS. Despite these similarities, Darly reported that differences existed between both groups, with parents of CWS demonstrating higher expectations related to child-rearing practices and were more demanding (Darley, 1955; Yairi, 1997).

Johnson and his colleagues (1959) also reported on the attitudes of parents of CWS. Similar to Darley (1955), Johnson utilized extensive interviews in which a wide variety of information was collected regarding attitudes and behaviors of 150 parents of CWS. Johnson reported that parents of CWS were significantly different than controls in regard to several areas. Although parental attitudes of CWS and CWDNS have been interpreted as more similar than different (Yairi, 1997), parents of CWS were observed to have higher demands and standards for their children when compared to parents of CWDNS (Yairi, 1997).

In an examination of some of the studies reviewed in this paper, as well as other earlier studies, Wingate (1962a; 1962b) examined studies that explored environmental factors related to stuttering, as well as the use of labeling stuttering behaviors on the development of stuttering.
Wingate concluded that research until this point has produced contradictory results. Also, Wingate suggested that, due to these conflicting findings, the validity of Johnson’s Diagnosogenic theory of stuttering should be called into question. Moreover, Wingate (1962a; 1962b) suggested that evaluating stuttering behaviors is not a sufficient explanation in determining the cause of the disorder.

Nearly twenty years later, Crowe and Cooper (1977) revisited the question of parental attitudes towards stuttering as well as parental knowledge about stuttering. In their study, 50 parents of CWS and CWDNS completed the Parental Attitudes towards Stuttering (PATS) Inventory and the Alabama Stuttering Knowledge (ASK) Test. The findings indicated that parents of CWS demonstrated a significantly more negative attitude towards stuttering when compared to the control group. Moreover, participant’s attitudes and knowledge of stuttering were significantly positively correlated. Because of the detrimental impact that attitudes can have on the development of stuttering, it was recommended that parental attitudes be assessed when treating CWS (Crowe and Cooper, 1977).

Summary

As evident by the large amount of research devoted to parents of CWS, this population has been considered influential in the development of stuttering. With the introduction of Johnson’s Diagnosogenic theory of stuttering, many researchers explored parents of CWS to determine if there were differences between parents of CWDNS in regard to parental diagnosis of stuttering and communication attitude toward stuttering. These studies produced contradictory findings and therefore demonstrated difficulty in proving that parents were essentially causing their children to stutter (Nippold & Rudzinski, 1995). Also, parental involvement in stuttering therapy has changed dramatically throughout the years, from parents being advised to not discuss
stuttering with their child (Johnson, 1942) to directly administering stuttering therapy (Onslow & Packman, 1999).

Models that Recognize the Importance of the Environment

Parents represent a variable within a larger category of environmental demands that can influence stuttering development. Consequently, many researchers have acknowledged the impact of the environment on stuttering development (Starkweather, 1987; Smith, 1999; Conture, Walden, Arnold, Graham, Hartfield, & Karrass, 2006). Furthermore, these same researchers have developed and proposed models of stuttering that explain the complex interaction of variables in stuttering development.

One of these models, and arguably one of the most influential models in stuttering treatment, is the Demands and Capacities Model (DCM) proposed by Starkweather (1987; Starkweather, Gottwald, & Halfond, 1990). Starkweather (1987) indicated that capacities for fluent speech arise from increased control of speech movements (coordination, reacting, planning, and producing speech movements) and speech rhythm. While these capacities for fluent speech are being developed, the child is also being exposed to demands placed upon their ability to produce fluent speech. According to Starkweather (1987), such demands include the development of language skills (rules for syntax, semantics, phonology, pragmatics) and, most notable to this literature review, parents and others in the child’s environment. In regard to others in the child’s environment, Starkweather (1987) writes, “The people with whom children communicate – their parents, siblings, relatives, peers, and teachers – also place demands on them (p. 78). Starkweather (1987) continues,

…a child comes to understand how much time is available for any activity according to the urgency with which parents and other important people undertake daily activities. Thus, a rushed household places a demand on a child to do everything rapidly (p. 78).”
Furthermore, the DCM states that if the demands for fluent speech outweigh the child’s capacities for fluent speech production, then disfluency, or potentially stuttering, will occur. In contrast, if the child’s capacity for fluent speech is greater than the demands then fluent speech will be produced (Starkweather, 1987; Starkweather et al., 1990).

In addition to the DCM, Smith (1999) and Smith and Kelly (1997) included the importance of the environment in their dynamic multifactorial model of stuttering. In their model, the environment interacts with a variety of areas such as speech production, language, emotions, and genetics. Moreover, these factors are represented on a continuum of stability and instability. In addition, any change in the environment could potentially produce changes in other factors (Bennett, 2006). The dynamic interactions between these variables help to explain the development of stuttering.

The influence of the environment on stuttering development is represented in Conture et al.’s (2006) Communication-Emotional (C-E) Model of Stuttering. Four components interact within the C-E Model of Stuttering and consist of (1) proximal contributors, (2) distal contributors, (3) exacerbation, and (4) the speech disruption. An individual’s genetics and the influence of the environment comprise distal contributors that are having an influence on proximal contributors (speech and language planning and production), exacerbation factors (emotional reactivity and regulation), and speech disruptions (stuttering). Parental influences consist of environmental factors in the C-E Model of Stuttering and are recognized as an important contributor to stuttering. In describing the distal contributors of the C-E Model of Stuttering, Conture et al. (2006) write “…genetics may load the gun but the environment seemingly pulls the trigger (p. 24).”
Summary

The environment has been recognized as an important contributing factor in the development of stuttering. The influence of the environment can be observed in several models of stuttering development such as the DCM (Starkweather, 1987), the multifactorial model of stuttering (Smith & Kelly, 1997; Smith, 1999), and the C-E Model of stuttering (Conture et al., 2006). Finally, parents of CWS are considered to be an important environmental influence on the development of stuttering and have been recognized in current models of stuttering.

The Influence of Parental Interactions on Stuttering

Since the early research from the 1930’s, researchers have continued to acknowledge the importance of the role that parents have on the development of stuttering. As Nippold and Rudzinski (1995) point out, this type of research continued into the 1970’s and beyond. As previously mentioned, the role of parental influence on the development of stuttering has been included in several models that explain stuttering. Most notably, the DCM (Starkweather, 1987) has been influential in clinical treatment and in interpreting research findings in the area of childhood stuttering. In the following literature review it will become apparent that many researchers have investigated certain demands that are placed upon CWS, particularly parental speaking behaviors, such as speech rate, use of interruptions, and conversational styles, to determine if these variables have an impact on the development of stuttering. This section will examine and review this literature. As previously mentioned, an in-depth evaluation of the literature related to the speech of parents of CWS can be found in the Nippold and Rudzinski’s review (1995). However, while Nippold and Rudzinski take a chronological approach to some of these studies, the following review of the speech of parent of CWS will be based on topic area consisting of (1) speech rate, (2) interruptions, and (3) other conversational aspects.
One parental speaking behavior that has been examined extensively is the influence of parental speech rate on stuttering. One of the earlier studies of parental speech rate was conducted by Meyers and Freeman (1985a) where they compared the speech rates of mothers of CWS and CWDNS. Participants included 12 CWS and their mothers compared to 12 CWDNS and their respective mothers. The speech of the parents and children were recorded during a ten minute parent-child interaction and a speech rate measure was later conducted. Meyers and Freeman (1985a) found that mothers of CWS demonstrated a faster speech rate when compared to mothers of CWDNS. Furthermore, as the child’s stuttering severity increased their speech rate decreased. In contrast, mothers responded to slow speaking children with increased speech rates. Meyers and Freeman provided a different way in which to explain the results, stating that as mothers’ speech rate increased so did stuttering behaviors. In their concluding remarks, Meyers and Freeman suggested that CWS may disrupt the flow of a conversation, thus prompting their communication partner to speak faster. Finally, Meyers and Freeman indicated that while that one interpretation of the results could suggest that mothers of CWS who speak quickly contribute to the maintenance of stuttering in children, however these authors indicate “…that such a conclusion may be hasty and simplistic (Meyers & Freeman, p. 441)” as mothers of CWDNS were also likely to speak fast when conversing with CWS. As a result, it was determined that there was an interaction between both the child’s stuttering and speech rate as well as the mothers’ speech rate.

Stephanson-Opsal and Bernstein-Ratner (1988) investigated whether decreased parental speech rate would affect changes in their child’s stuttering. Participants consisted of two mother-child dyads. Clinicians observed and monitored the participants over the course of ten weeks in
their home environment. After the initial baseline session, clinicians provided training to parents in how to slow their speaking rate when conversing with their child. Furthermore, the clinicians measured and analyzed disfluency counts, child speech rate, and the mother’s speech rate during five sessions of observation. Findings indicated that although disfluencies decreased when mothers demonstrated a slower rate of speech, the CWS actually increased their speaking rate when mothers would demonstrate slower speaking rates. Stephanson-Opsal and Bernstein-Ratner suggested that instructing parents to decrease their speech rate can be viewed as beneficial in increasing the fluency of CWS. However, slower maternal speech rate did not appear to have an effect on reducing the speech rate of CWS (Stephanson-Opsal & Bernstein-Ratner, 1988).

In another study of speech rate, Guitar, Shaefer, Donahue-Kilburg, and Bond (1992) reported a case study of parental child-interactions with a five year old CWS. In addition to analyzing speech rate, Guitar et al. examined several other parent-child interactions such as parental interruptions, accepting and non-accepting statements, as well as parental utterances that were questions. Parent-child interactions were videotaped and analyzed for the previously mentioned variables. In respect to speech rate, Guitar et al. found that the mother’s speaking rate was significantly correlated with stuttering behaviors. Guitar et al. suggested these findings be interpreted with caution, as other variables could potentially contribute to the stuttering behavior. Also, Guitar et al. indicated that different interaction styles between the father and mother contributed to different amounts of stuttering behavior. Thus, it appears the findings of Guitar et al. provide some support to the notion that altering speech rate can facilitate fluent speech in CWS.

Bernstein Ratner (1992) investigated the effect that parental speaking styles had on the fluency levels of CWDNS. One of these variables explored was parental speech rate. Twenty
parent-child dyads participated and were requested to modify their speaking behaviors to their normally fluent children. Participants were divided into two groups where they were requested to either speak more slowly to their child, or speak slowly in conjunction with using more simple language. Findings revealed that despite the use of slower maternal speech, children’s rate of speech did not change among the two groups. In addition, Bernstein-Ratner suggested that instructing parents to slow their speaking rate would influence other aspects of their interactions with their child. More specifically, Bernstein-Ratner suggested “…that instructions to slow maternal speech rate may result in ‘spill-over behaviors’ that affect maternal syntax, utterance length, and interspeaker latency (Bernstein-Ratner, p. 18)”.

The influence of speech rate on stuttering was also studied by Kelly and Conture (1992). In addition to investigating speech rate, other variables such as interrupting behaviors and response time latency were included to observe whether these behaviors had an influence on stuttering. Participants included 13 CWS and their parents along with a control group. Similar to other methodologies examining the influence of parental speech rate, conversations between parent-child dyads were videotaped to be analyzed later for the previously described behaviors. In regard to speech rate, there were no significant differences between all four groups (mothers of CWS and CWDNS, as well as CWS and CWDNS). Therefore, it appeared that the findings of Kelly and Conture (1992) did not observe speech rate to have an influence on the duration, or frequency, of disfluencies for CWS (Kelly & Conture, 1992).

Although the Kelly and Conture (1992) study investigated the speech rate of mothers, they did not take into consideration the effect of the father’s speaking style on the speech of the CWS and CWDNS. Therefore, Kelly (1994) conducted a study where the father’s speaking style was the focus of the investigation. In order to investigate the effect of these interactions, Kelly
recorded and analyzed the conversations of 11 CWS and their fathers with control groups. Findings indicated that there was no difference between the speech rate of fathers of CWS and father of CWDNS. Moreover, it did not appear that the speech rate of fathers had an influence on the frequency of disfluencies of the CWS. As a result, Kelly indicated that speech rate does not appear to cause, or exacerbate, stuttering behaviors in CWS.

In a related study, Yaruss and Conture (1995) investigated other variables that may influence stuttering in children. Among these variables were speaking rate. In order to investigate the influence of speech rate on stuttering, Yaruss and Conture collected data on 20 mother-child dyads (10 mothers of CWS and 10 mothers of CWDNS). The analysis of the conversational samples revealed no significant differences between these four groups. However, Yaruss and Conture reported a positive relationship between the children’s stuttering severity and the overall difference between parent-child speaking rates. As a result, Yaruss and Conture suggested that assisting parents to become more congruent with their child in regard to their speaking rates may possibly decrease their child’s stuttering severity.

Guitar and Marchinkoski (2001) revisited the influence of mothers’ speech rate on the speech rate of their child who stutters. Six mother-child dyads participated in conversational analysis in which speech rate was calculated. Prior to the analysis, parents were instructed by a clinician on how to reduce their speaking rate. Measures of parental speaking rate were seen to decrease by around 50%. Guitar and Marchinkoski indicated that previous studies of parental speaking rate did not see a dramatic decrease in speaking rate, specifically citing the Berstein-Ratner (1992) study, where parents did not reduce their speaking rate despite being asked to slow their speaking rate. The analysis indicated that five out of the six parent-child dyads decreased their rate of speech. Findings indicated that when parents used a slower rate of speech their
children, in turn, used a slower rate of speech (Guitar and Marchinkoski report that this was also the case for faster speaking rates).

*Interruptions*

In addition to examining the influence of speech rate on the development of stuttering, researchers have also investigated how parental use of interruptions may contribute to the development of stuttering. Meyers and Freeman (1985b) conducted a study where they examined whether mothers of CWS demonstrated greater interruptions when compared to parents of CWDNS. In total, Meyers and Freeman analyzed the speech of 24 dyads (12 CWS and 12 CWDNS along with their mothers). The recorded conversations included both groups of mothers interacting with familiar CWS, unfamiliar CWS, and CWDNS. Overall, mothers interrupted disfluent speech in children more when compared to fluent speech. Moreover, mothers of CWDNS demonstrated greater interruptions of CWS when compared to mothers of CWS.

Kelly and Conture (1992) also included interrupting behaviors as a variable in their investigation of parent-child interaction styles (this study was reviewed earlier under the speaking rate section). Their results indicated no differences between parents of children who do and do not stutter. However, Kelly and Conture reported a positive correlation between the children’s stuttering severity and the duration of their parental interrupting behaviors. In other words, it appears that although parents of CWS did not differ from parents of CWDNS, stuttering severity was related to interrupting behavior.

In a later study, and one that has already been reviewed in this paper, Kelly (1994) also examined interrupting behaviors in fathers of CWS as part of a larger study examining fathers’ parental interactions styles with their child that stutters. In Kelly’s study, no significant
differences were found between fathers of CWS and CWDNS. Yet, it was discovered that fathers of CWS produced more interruptions when compared to their CWS.

*Other Conversational Aspects*

Along with studies that explored the influence of speech rate and interruptions on the development of stuttering, other studies have investigated the influence of other conversational aspects on the development of stuttering. For example, Weiss (2002) investigated the use of recasts, a language strategy that expands upon a child’s statement, by parents of 13 school-aged CWS and a control group. When the use of recasting by the two parent groups was compared, results indicated that there were no differences between the two groups in regard to their use of recasting. Furthermore, parents of CWS did not focus their use of recasting on stuttering. Weiss concluded that recasting is another variable that is similar between parents of CWS and parents of CWDNS.

Another investigation of the influence of conversational aspects on stuttering development was conducted by Savelkoul, Zebrowski, Feldstein, and Cole-Harding (2007). In this study, Savelkoul et al. investigated the coordinating interpersonal timing (CIT) of CWS and their parents. Savelkoul et al. defined CIT as “…the degree to which the temporal aspects of the vocal behaviors of co-conversationalists are correlated over the course of a conversation (Savelkoul et al., p. 1).” In order to study CIT, Savelkoul et al. recorded and analyzed the conversations of 10 CWS and both their parents, as well as a control group. The analysis included the investigation of vocal state behaviors which the authors described as the degree of interruptive speech, pauses, vocalization, and “turnswitching” pauses. Findings suggested that parents of CWS and CWS were more influenced by each other’s vocal state behaviors versus the control group. Furthermore, Savelkoul et al. concluded the possibility that CWS were more
influenced by changes in timing during conversations with their parents when compared to CWDNS.

Summary

The influence of parental speaking behaviors on the development of stuttering has been a popular research topic in the stuttering literature. In this section, articles exploring the issue of parental influence on stuttering have been reviewed. Overall, it appears that speech rate, interrupting behaviors, and other conversational aspects, such as recasting and timing in conversations, have been the behaviors that have been seen the greatest research activity. Also, little research has been conducted on fathers of CWS (Kelly, 1994), as the majority of research regarding parents of CWS have consisted of mothers of CWS. To reiterate, while other parental influences on stuttering development have been explored, I have chosen to highlight the variables in which it appears the majority of this type of research has been conducted.

The findings regarding the influence of parental speaking behaviors on stuttering development are mixed and contradictory. In respect to the influence of speech rate, some results suggest that changes in parental speaking rate has no effect on stuttering behavior (Kelly & Conture, 1992; Kelly 1994) and the speech rate of CWS (Bernstein-Ratner, 1992). However, some studies suggest that altering speech rate does have an influence on increasing fluent speech in CWS (Stephanson-Opsal & Bernstein-Ratner, 1988, Guitar et al., 1992). Furthermore, there is some evidence to suggest that, when provided with adequate training from a clinician, parents can decrease their speaking rate substantially and changes can be observed in the stuttering frequency of CWS (Guitar & Marchinkoski, 2001). This contradictory view regarding the influence of speech rate on stuttering is also shared by Nippold and Rudzinski (1995) in their extensive review of the influence of parental speech behaviors on stuttering. In regard to the
influence of interrupting behaviors, some research has suggested that stuttering severity is related to the duration of interrupting behaviors (Kelly & Conture, 1992), however other studies have found that interruptions does not exacerbate stuttering (Meyers & Freeman, 1985b; Kelly, 1994). Nippold and Rudzinski (1995) also acknowledge the conflicting results regarding the influence of interruptions on the development of stuttering, suggesting that previous studies investigating the role of interruptions in stuttering development did not find a direct relationship between interruptions and stuttering development. In addition, more recent research suggests that there is no difference between parents of CWS and parents of CWDNS in regard to recasting (Weiss, 2002). Also, other research has suggested that parents of CWS and their children may influence each other more in conversation versus parents of CWDNS and their children (Savelkoul et al., 2007).

Parental Involvement in Stuttering Therapy

Parents have also been seen as influential in the treatment process for CWS. As previously stated in the DCM model of stuttering (Starkweather, 1987), the environment can be seen as influential in the development of stuttering. Furthermore, environmental influences are not just observed in speech, but in general human development as well. Many researchers in the area of stuttering have acknowledged this influence and have advocated for the inclusion of parents in stuttering therapy (Guitar, 2006; Rustin & Cook, 1995, Zebrowksi &Schum, 1993).

The Lidcombe Program (Onslow, Menzies, & Packman, 2001) provides a good example of a therapy program that focuses on the importance of parents in stuttering development and incorporates parents into stuttering therapy to decrease stuttering. Moreover, the program is influenced by earlier research that suggested direct attention to stuttering does not exacerbate the disorder (Martin, Kuhl, & Richardson, 1972). In summary, the Lidcombe Program is a parent
administered treatment for stuttering that utilizes principles of operant conditioning to treat stuttering. Initially, CWS are seen by a speech-language pathologist (SLP), and once the child has achieved a certain level of fluency with the SLP in a clinical setting, the parents are incorporated into the treatment process. In treatment, parents reward fluent speech productions and are provided with training in how to correct stuttering behaviors in a non-judgmental, positive manner. During the treatment process, the SLP monitors and consults with the parents regularly about their child’s progress in stuttering treatment (Onslow et al., 2001).

In their writings of the development of the Lidcombe Program, Onslow et al. (2001) described previous studies that led to the current version of the program. One of these first studies conducted was by Onslow, Costa, and Rue (1990). In this study, the authors reported on the preliminary findings of four CWS between the ages of three and five years of age. All participants were required to have a time period of six months post onset of stuttering. An early version of the Lidcombe program was utilized and a parent was trained by a SLP on how to verbally respond to fluent and stuttered speech. Fluent speech productions were rewarded with praise while parents responded to stuttering in a non-judgmental nature, requesting their child to repeat the stuttering moment in a more fluent manner. Onslow et al. (1990) found that stuttering decreased for all four subjects during the intervention time period, as well as during a nine month maintenance period.

In another study of the Lidcombe Program, Onslow, Andrews, and Lincoln (1994) wanted to expand on the findings of Onslow et al. (1990) and test the Lidcombe Program with a larger sample of participants. Therefore, the researchers conducted the Lidcombe Program with 12 CWS and their parents, as well as a control group. Treatment procedures were similar to that of Onslow et al. (1990) and included parental verbal responses to stuttered and fluent speech
productions. Onslow et al. found that stuttering frequency decreased for the experimental group immediately following the treatment. Furthermore, 9 month and 12 month post treatment data suggested that stuttering frequency decreased when compared to similar adult stuttering programs at the time.

Other stuttering treatment programs have recognized the benefit of incorporating parents into the therapy process. Mallard (1998), for example, described a stuttering treatment program that emphasized family involvement in the management of stuttering in elementary school-aged children. Families and the clinician use problem solving skills in order to treat stuttering. In his study, Mallard (1998) reported that 82% of the 28 participating families were successful in the management of stuttering when they participated in this two week therapy program.

Another example of parental involvement in stuttering treatment is the Palin-Parent-Child Interaction (Palin PCI) therapy for stuttering (Kelman & Nicholas, 2008 as cited in Botterill & Kelman, 2010). In Palin-PCI, and similar to the Lidcombe Program, parents are essentially their child’s clinician in managing stuttering. Parents meet regularly with a SLP. The SLP monitors the parents’ feedback for and interaction with their child. Parents are trained to manipulate the environment and their interaction styles to increase fluent speech. Furthermore, parents acknowledge stuttering with their children, as well as explore their own feelings and perceptions regarding disfluent speech (Botterill & Kelman, 2010). In order to measure the effectiveness of the Palin-PCI treatment program, Millard, Nicholas, and Cook (2008) followed six participants who were involved in the Palin-PCI program. Their findings indicated that after six clinical sessions and six weeks of clinician monitoring, stuttering frequency was decreased. Therefore, it appears that Palin-PCI is effective, to some degree, in decreasing stuttering behaviors in CWS.
Summary

Research suggests that parental involvement in stuttering therapy is beneficial. Most notably, the Lidcombe program (Onslow et al., 1990; 1994), the Palin-PCI (Millard et al., 2008), and a family approach to stuttering treatment (Mallard, 1998) have reported positive findings when parents are involved in the treatment process. Researchers from the previously described programs, as well as other authors, have inquired regarding the impact of other variables that may potentially be contributing to the success of these treatments in CWS (Onslow, 1990; 1994). Therefore, it appears that additional research is required to fully understand other variables that may be contributing to assisting these CWS to achieve success in the previously described stuttering programs.

Adolescence: A Unique Time Period in Human Development

In 1904, G. Stanley Hall was the first researcher to provide an in-depth description of the time period of adolescence as being that of “storm and stress” and recommended the continued study of this unique population (Arnett, 1999). Since the time of Hall’s writing, there has been a general consensus among researchers, writers, and clinicians that adolescence is a unique developmental period.

One of the unique developmental changes in adolescence is that of identity formation. In his psychosocial theory, Erikson (1963) proposed that adolescents are confronted with a conflict regarding the establishment of their identity. This conflict is further described in Erikson’s psychosocial stage of “identity vs. role diffusion (p. 261).” For Erikson, “crisis/exploration” and “commitment” are instrumental factors in identity development (Marcia, 1966; Muuss, 1996). Furthermore, Muuss (1996) described how James Marcia expanded upon these two factors in proposing four categories of identity achievement along Erikson’s identity development.
continuum. These identity statuses by Marcia consisted of the presence or absence of crisis/exploration and commitment and consisted of categories such as identity diffused, foreclosure, moratorium, and identity achieved (Marcia, 1966; Muuss, 1996).

Identity development has also been mentioned in the stuttering literature. For example, Daniels and Gabel (2004) discussed how people who stutter may experience difficulty in establishing a positive identity due to stuttering. Also, Daniels and Gabel describe how Sheehan’s (1970) role-conflict theory is relevant to the discussion of stuttering and identity development, as in Sheehan’s theory individuals who stutter are in a conflict between a desire to approach and avoid a speaking situation. Sheehan (1970) noted the variability of stuttering and suggested that when a person who stutters engages in speaking tasks that are “…removed from the self…(p.4)”, like speaking in an accent or taking a role in a play, people who stutter are able to be fluent. In contrast, when a speaking situation is related to the person (i.e. introducing themselves), stuttering will more likely occur (Sheehan, 1970).

The cognitive changes that occur in adolescence can also give rise to egocentric types of thinking during this time period. Elkind (1967) describes two unique “mental constructions” that contribute to egocentric thinking as adolescents begin to develop formal operational thought. The first of these constructions is what Elkind describes as the “imaginary audience.” Elkind goes on to state that the imaginary audience is the adolescent’s belief that others are consistently scrutinizing them. In his words, Elkind describes the imaginary audience further:

In a sense, then, the adolescent is continually constructing, or reacting to, an imaginary audience. It is an audience because the adolescent believes that he will be the focus of attention; and it is imaginary because, in actually social situations, this is not usually the case (unless he contrives to make it so) (Elkind, 1967, p. 1030).

Another mental construction is what Elkind describes as the “personal fable,” which is the belief the adolescent has that they are invulnerable to harm as well as the confidence that others are
unable to understand their feelings. Personal fable is chosen to label this construction because according to Elkind is “…a story which he [the adolescent] tells himself and which is not true (p. 1031).”

There are also social cognitive changes that occur during adolescence that affect how adolescents perceive others and their self-perceptions. Livesley and Bromley (1973) described some of the subtle changes that occur in social cognitive development and how these changes affect how individuals describe others and form impressions. In early childhood, Livesly and Bromely suggested that the majority of descriptions are stereotypical in nature and lack personal characteristics of the individual. Yet, in adolescence these descriptions become more sophisticated, as individuals form their perceptions of others by acknowledging the environmental factors that may contribute to the person’s behavior, as well as begin to use phrases that suggest frequency of an individual’s behavior (i.e. “very”, “sometimes”). In terms of self-perceptions, Harter, Bresnick, Bouchey, and Whitesell (1997) indicated that the construction of the self in adolescence is multidimensional and that adolescents may view themselves differently depending upon the social context. For instance, adolescents may perceive themselves as talkative with their friends, shy with their parents, and disruptive with classmates. Moreover, Harter et al. (1997) acknowledge that previous research found that these differentiated self perceptions/attributes are more evident with older adolescents when compared to younger adolescents (Harter & Monsour, 1992). Also, Harter et al. indicated that adolescents report “true” (speaking what I want to say) and “false” (being fake) behaviors in conjunction with their multiple roles. Moreover, as adolescents get older they are more able to identify these “true” and “false” behaviors when compared to younger adolescents (Harter et al., 1997).
Adolescents who Stutter

Stuttering may present challenges to adolescents who stutter (AWS) due to the potential impact stuttering can have on quality of life (Yaruss & Quesal, 2004). Prior to the writings of Schwartz (1993), there was little acknowledgement of this population in the stuttering literature. Nevertheless, some literature existed that reported information on this age group. Two examples of early studies of AWS focused on recovery of stuttering and perceptions of parental attitudes (Cooper, 1972; Yairi & Williams, 1971). Upon reviewing the literature related to AWS, the research can be categorized as (1) earlier studies of AWS, (2) reviews, recommendations, and suggestions when working with AWS, (3) clinical and psychosocial aspects, (4) anxiety levels of AWS, and (5) perceptions of AWS.

Early Studies of Adolescents who Stutter

One example of an early study of AWS was conducted by Yairi and Williams (1971) in their investigation of the perceptions of children who stutter regarding parental attitudes. Although participants are described as “children” and “boys,” their ages ranged from 11 to 13 years of age. Based upon their age, participants could be viewed as early adolescents rather than “children.” Semantics aside, participants included 34 males who stuttered along with 34 males in a control group. All participants completed the Children’s Report of Parent Behavior Inventory. Findings indicated that the group of AWS perceived their parents as less hostile and controlling, as well as behaving with more autonomy and love when compared to the control group. Also, Yairi and Williams point to the fact that these findings are in contradiction with previous studies who found parents of CWS as displaying potentially negative characteristic (Yairi & Williams, 1971).
In another study, Cooper (1972) examined the phenomenon of recovery from stuttering in junior and senior high school students. Other variables such as family history of stuttering, participation in speech therapy, and stuttering severity were examined to determine if these factors had an influence on recovery rates. Although participants were described as “… junior and senior high school students… (Cooper, 1972, p. 633),” the age of participants fell within the younger and older adolescent age range (ranging from 7th through 12th grade). Initially, a total of 5,054 potential participants were interviewed and it was revealed that 68 individuals self-reported that they were recovered from stuttering while 119 individuals were “active stutterers.” The results from this study were compared to a previous study conducted by Sheehan and Martyn (1970 as cited in Cooper, 1972) regarding recovery rates in people who stutter. Results indicated that 30% of junior high school students reportedly recovered from stuttering, while 44% of senior high school students recovered from their stuttering. In total, there was a combined recovery rate of 36% for this population of people who stutter. Factors such as stuttering severity and family history of stuttering continued to be influential in determining the probability of recovering from stuttering (Cooper, 1972).

Recommendations, Reviews, and Suggestions

Schwartz (1993) was one of the first writers to bring attention to the lack of research regarding AWS. In his writings, Schwartz indicated that clinicians and researchers should attempt to incorporate therapy principles for children and adults who stutter in treatment approaches for AWS. Furthermore, he calls attention to how families can be incorporated in the therapy process for younger and older AWS. For younger AWS, Schwartz suggested that more direct parental involvement may be beneficial in increasing fluent speech. Moreover, Schwartz acknowledges parental reports of having to remind their child to use fluency techniques. In terms
of older AWS, Schwartz takes a different perspective, suggesting that older AWS do not want to be reminded about their speech and their stuttering. In addition, Schwartz indicated that treatment approaches for older AWS tend to utilize approaches used for adults who stutter. Overall, Schwartz indicates that AWS present unique challenges for SLPs and that treatment approaches need to be adapted in order to accommodate the needs of this population.

Shortly after the writings of Schwartz (1993), Daly, Simon, and Burnett-Stolnack (1994) provided information regarding AWS by acknowledging the unique challenges that AWS bring to a clinical setting. Furthermore, Daly et al. provided clinical suggestions such as using analogies about sports and driving a car to describe the speaking process, as these are activities adolescents may be most interested in. In addition, therapy procedures consisted of two phases, speech techniques and cognitive strategies, are suggested for clinician’s working with AWS. In their concluding remarks, Daly et al. indicated that five basic principles should be included in a treatment approach with AWS. These principles include the SLP being energetic about the therapy process, goals of treatment need to be clarified and established, thoughtful consideration regarding the frequency of speech therapy visits, an integration of speech techniques and cognitive strategies, and finally, the use of counseling strategies (Daly et al., 1994).

In addition to Daly et al. (1994), Cooper and Cooper (1995) describe a stuttering therapy program for AWS in which affective, behavioral, and cognitive aspects are addressed. Because Four stages comprise this treatment approach, named the Cooper Personalized Fluency Control Therapy – Revised (CPFCT-R). The first stage consisted of “Structuring” which involves the organization of the speech therapy sessions with the clinician asking the client to identify their stuttering behaviors and focusing on open communication between the clinician and client. The second stage, “Targeting,” consisted of having the client modify their stuttering behaviors, as
well as creating an environment where the clinician and client can discuss attitudes and feelings about the client’s stuttering. The third stage is entitled “Adjusting” and focuses on the clinician providing reinforcement to the client. In addition, the clinician and client explore which fluency enhancing techniques are most beneficial in allowing the client to manage their stuttering. The fourth and final stage is called the “Regulating” stage and consists of working with the client to develop a feeling of control over their stuttering. Furthermore, the client self evaluates their use of fluency enhancing techniques and strategies to manage their speech, as well as their feelings and attitudes related to stuttering (Cooper & Cooper, 1995).

In another paper, Blood, Gabel, Tellis, and Blood (1998), similar to previous researchers, draw attention to the lack of research regarding AWS and discussed the importance of counseling when working with AWS. In their discussion, Blood et al. provided support for including counseling as part of the therapy process for AWS, as well as provide suggestions to clinicians who work with AWS. These suggestions come in the form of “The ABCs of Working with Adolescents (Blood et al., p. 326, 1998),” as Blood et al. use the alphabet as a way to discuss these suggestions. Specifically related to communication, Blood et al. stress the importance that parts of stuttering therapy should be dedicated to increasing communication skills with their listeners/communication partners (Blood et al., 1998).

Similar to other writers, Manning (2004), in his clinic program Clinical Decisions With Adolescents who Stutter, described the unique clinical challenges of working with AWS. In his program, Manning (2004) emphasizes the therapeutic relationships with AWS, focusing on a variety of problem solving strategies, the use of parental involvement, and the importance of practicing speech techniques. At the same time, Manning (2004) acknowledges that AWS may be reluctant to engage in stuttering therapy due to the parental involvement aspect of therapy.
Zebrowski (2002) has written about establishing therapeutic relationships with AWS. In her writing, Zebrowski discusses the importance of understanding the culture of adolescence and how relationships with others, especially their friends, are important in adolescence. In addition, Zebrowski explains the importance of working with how adolescents think and feel about their stuttering and provides recommendations for working clinically with this population. Some of these recommendations included incorporating positive self-talk into therapy, the use of imagery strategies, and restructuring cognitive thoughts related to stuttering.

Other researchers have described counseling techniques when working with AWS. Manning (2003), for example, discusses some of his clinical experiences working with AWS. In addition, he offers recommendations related to counseling AWS. Manning brings attention to several points such as the importance of allowing the AWS to decline speech therapy, the ability for the clinician to understand the impact stuttering is having on the adolescents, modeling strategies to manage stuttering, and finally the importance of parental involvement in stuttering therapy. For Manning, parental involvement is a critical element in order for AWS to make lasting changes for improving their ability to manage their stuttering. In addition, it is important that both parents be involved in the therapy process. Furthermore, Manning suggests that a negative message could be communicated if parents of AWS are unwilling to participate in stuttering therapy suggesting that stuttering is not their problem, but the adolescents to deal with on their own. In addition to Manning (2003), Zebrowski (2006) provides recommendations when counseling AWS. Along with providing information on stuttering related emotions experienced by AWS, Zebrowski provides counseling recommendations to help AWS deal with feelings related to stuttering. Some of these recommendations include the use of questions (closed vs. open), active listening strategies, and validating feelings (Zebrowski, 2006).
Clinical and Psychosocial Aspects

Blood (1995) suggested that treatment approaches for AWS should incorporate other factors in an adolescent’s life such as teasing, others’ involvement in speech therapy, prior speech therapy experiences, and self-reflective skills. In his proposed relapse management program, POWER²; Blood incorporated some of these factors. In order to test the effectiveness of the POWER² program, a multiple baseline design was utilized with three adolescents between 14 and 15 years of age. Results indicated that participant’s decreased their disfluencies and made positive changes in their attitudes towards stuttering. In addition to the topic of relapse management, Lewis and Scott (2009) reported data regarding the use of Client-Directed-Outcome-Informed (CDOI) therapy for an AWS. Lewis and Scott described this approach as allowing the client to have more responsibility in their therapy session and providing the clinician with feedback regarding the course of feedback. In order to determine if CDOI therapy would be beneficial in working with AWS, Lewis and Scott conducted this type of therapy with a 19 year-old AWS. Results were presented on this case study and positive gains were observed.

In another study, Blood, Blood, Tellis, Gabel, Mapp, Wertz, and Wade (1998) examined 64 AWS and a control group related to their coping resources and their perceptions of their communication skills. Results indicated that the majority of participants used similar strategies when dealing with stuttering when compared to normative data on other adolescents with a variety of problems. However, differences were noted between younger (13-15 year of age) and older (16-18 years of age) AWS in terms of their use of coping responses with younger AWS utilizing more emotional and avoidant responses to stuttering when compared to older AWS. Furthermore, older AWS had the tendency to use more approach based responses when dealing with stuttering. As a result, it appeared that as AWS increased in age so did their repertoire of
coping responses related to stuttering. Finally, AWS and the control group shared the same perceptions regarding the five most important communication skills. These skills included “Turn Taking,” “Nonverbal Expression,” “Vocal Tone Comprehension,” “Perspective Taking,” and “Clarification.” In their concluding remarks, Blood et al. stated their results provide support for including general communication skills into a stuttering treatment program for adolescents (Blood et al., 1998).

Communication apprehension and confidence reported by AWS has also been studied. Blood, Blood, Tellis, and Gabel (2001) investigated these variables with 39 AWS between 13 and 18 years of age as well as with a matched control group. The findings revealed that AWS demonstrated greater communication apprehension levels versus adolescents who do not stutter. Moreover, AWS reported less communication competence and more communication anxiety during “group discussions” and “interpersonal conversations (Blood et al., 2001).” In another study by this research team, Blood, Blood, Tellis, and Gabel (2003) explored levels of self-esteem, disclosure strategies, and perceived stigma in AWS. Participants included 48 AWS between the ages of 13 and 18. Results indicated that AWS were comparable to the normative data related to self esteem. However, Blood et al. (2003) report the majority of participants reported not discussing stuttering with others, as well as feeling stigmatized by stuttering. When younger and older adolescents where compared, the younger adolescents were found to view stuttering as more stigmatizing (Blood et al., 2003).

The experiences of AWS related to speech therapy have also been explored by Hearne, Packman, Onslow, and Quine (2008). In their investigation, Hearne et al. interviewed 13 AWS regarding their general experiences as well as experiences related to speech therapy. The majority of participants reported a lack of understanding from others regarding their stuttering, as
well as reporting that they seldom spoke to others regarding their stuttering (Hearne et al., 2008). Due to the relevance of Hearne et al.’s findings related to communication about stuttering, this study will be reviewed in more detail in the section regarding parent-child communication about stuttering.

**Anxiety Levels**

Anxiety has also been a topic of interest when investigating AWS. For example, Blood, Blood, Maloney, Meyer, and Qualls (2007) examined anxiety levels and self esteem ratings in 36 AWS and 36 AWDS between the 7th and 12th grade. It was found that the majority of AWS (83%) scored within the normal range for anxiety levels. In addition, AWS scored within the normal range on self-esteem ratings. Although significant differences were observed between AWS and AWDS on anxiety measures, the mean scores for both groups were comparable to the normative data related to anxiety levels. Furthermore, Blood et al. (2007) note that AWS who reported co-occurring speech and language disabilities reported higher anxiety ratings when compared to AWS who did not have co-occurring speech and language disabilities. In this same year, Blood and Blood (2007) examined the experiences of AWS with physical aggression and bullying and how these variables related to anxiety levels in this population. This study included 18 “children” who stuttered from the ages of 11 to 12 along with a control group. Findings revealed that AWS experienced greater amounts of self-reported anxiety when compared to AWDS. Moreover, there was a significant positive correlation for bullying and anxiety among the AWS. Anxiety in AWS was also explored by Mulcahy, Hennessey, Beilby, and Byrnes (2008) in the investigation of anxiety as it relates to attitudes towards communication and stuttering severity. This study consisted of 37 adolescents, 19 AWS and 18 AWDS, ranging from 11 to 18 years of age. Findings pointed to multiple differences between AWS and AWDS, with
AWS reporting higher anxiety levels when compared to AWDS. Furthermore, anxiety levels for AWS were associated with reports of difficulty speaking in everyday situations.

**Perceptions of Adolescents who Stutter**

There are numerous studies that have investigated the perceptions of adults who stutter (Doody, Kalinowski, & Armson, 1993; Turnbaugh; Guitar & Hoffman, 1979; Woods & Williams, 1976; Yeakle, & Cooper, 1986) as well as some studies that have examined children’s perceptions of stuttering (Ezrati-Vinacour, Platzky, & Yairi, 2001; Giolas & Williams, 1958). In contrast, there is little research concerning the perceptions of AWS. In one study, Weisel and Spektor (1998) investigated the perceptions of 164 AWDS in the 10th and 11th grades towards a hypothetical adolescent male and female who stuttered. Furthermore, Weisel and Spektor sought to determine if participants’ attitudes towards their own communication, as well as gender, had an effect on their perceptions of an adolescent who stuttered. Findings revealed a relationship between male’s attitudes towards their own communication and their attitudes towards a male AWS. In another study, Evans, Healey, Kawai, and Rowland (2008) examined the attitudes of 64 students ranging from 10-14 years of age regarding their perceptions towards a peer that stuttered. Also, gender, stuttering frequency, and types of Likert statements (affective, behavioral, and cognitive) were explored to determine if these variables had an effect on perceptions towards an adolescent who stuttered. Evans et al. found that the gender of the adolescent did not have an effect regarding their perceptions of a peer who stuttered. In addition, behavioral and cognitive Likert statements were more positive for samples that contained <1% of stuttering versus samples that contained greater stuttering frequencies. Conversely, affective statements did not differ based upon stuttering frequency. In a similar study, McGee, Kalinowski, and Stuart (1996) examined the perceptions of 36 high school students about a peer
who stuttered using a video documentary about stuttering. Findings indicated that participants
demonstrated a negative attitude towards stuttering prior to watching the videotape and this
negative attitude was seen even after participants, and in fact got worse, after viewing a
documentary about stuttering. Negative attitudes of high school students regarding stuttering
were also reported by Flynn and St. Louis (2011) in their study of 83 high school students.
However, unlike the findings of McGee et al., Flynn and St. Louis found these perceptions
improved following presentations in a video account, personal account, and video/personal
account format related to personal experiences with stuttering.

*Clinical Scales for Adolescents who Stutter*

There are several stuttering diagnostic tools available for AWS. For example, Manning
(2010) has developed the Self-Efficacy for Adolescents Scale (SEA-Scale) to examine
confidence levels in a variety of speaking situations. When completing the SEA-Scale, AWS are
requested to report their confidence in approaching and communicating in a variety of speaking
situations. The intended population for the SEA-Scale is AWS, however Manning indicates that
the scale can also be used with older school-age children. The Stuttering Severity Instrument-4
(SSI-4) (Riley, 2009), now in its fourth edition, is another diagnostic tool that can be used with
AWS. Initially developed by Riley (1972), the SSI provides a standardized score of stuttering
severity based upon three subscales that consist of frequency, duration, and physical
concomitants. Although limitations have been reported in the area of reliability and validity, the
SSI provides a comprehensive description of an individual’s stuttering severity and contains
standardized procedures for clinicians to follow (Guitar, 2006).

There are several stuttering scales that can be used with AWS that measure attitudes,
thoughts, and emotions related to stuttering. For instance, the Modified Erickson Scale of
Communication Attitudes (S-24), developed by Andrews and Cutler (1974), gathers information regarding an individual attitude towards communication and can be used with AWS to provide information about their general attitudes toward communication (Guitar, 2006). The Locus of Control of Behavior Scale (LCB Scale), by Craig, Franklin, and Andrews (1984) is an additional scale used to measure attitudes towards communication. As Guitar (2006) points out, this scale can be used to measure another component of communication attitude, consisting of the amount in which clients believe their behavior is controlled by internal or external events. More recently, Yaruss and Quesal (2006) developed the Overall Assessment of the Speaker’s Experience with Stuttering (OASES) which measures the impact of stuttering on various aspects of the person’s life as well as providing information about thoughts and feelings about stuttering. Finally, Chmela and Reardon (2001) present an assessment questionnaire entitled “Here’s What I Think” where CWS are asked about previous stuttering therapy experiences. As part of the questionnaire, Chmela and Reardon briefly inquire about parental involvement in stuttering therapy and if CWS have discussed stuttering with their parents. While Chmela and Reardon’s questionnaire is not standardized, it provides a structured questionnaire that a clinician can use to inquire about parental-child communication about stuttering.

Summary

There is a consensus in the stuttering literature that more research is needed on AWS. Many researchers acknowledge the unique challenges when working with AWS, as well as the developmental transitions that are occurring psychologically, socially, cognitively, and physically. Also, anecdotal evidence regarding AWS appears to far outweigh empirical studies on AWS. Moreover, although many diagnostic tools are available when assessing AWS, many of these assessments, with the exception of one (Chmela & Reardon, 2001), do not specifically
address the extent to which AWS discuss stuttering with their parents. Finally, it is interesting to note that some researchers highly recommended that parental involvement in the therapy process is essential (Manning, 2003; Zebrowksi, 2002).

Parent-Adolescent Communication

It is evident that a large amount of research exists that has examined parents of CWS. In comparison, little research has been devoted to AWS and how they communicate with their parents. By incorporating a family systems perspective into viewing parent-adolescent communication, one is able to more fully understand not only the broader context in which parent-adolescent communication occurs, but can describe the types of communication that occur in a family (Galvin, Bylund, & Brommel, 2008). This section will describe literature related to (1) family systems theory, (2) discuss the Circumplex Model, a conceptual framework that emphasizes family communication, (3) explain the importance of parent-adolescent communication during adolescent development, and (4) review literature in regard to family communication with children with disabilities.

Family Systems Theory

As Galvin et al. (2008) describe, family systems theory stems from the more encompassing General Systems Theory that they indicate “…provides a framework for understanding the enormous complexities of human organizations (p. 57).” To further explain the concept of a “system,” Galvin et al. write

Very simply stated, a system [their italics] is a set of components that interrelate with one another to form a whole. Due to the interconnections, if one component of the system changes, the others will change in response, which in turn affects the initial component. Therefore, a change in one part of the system affects every part of the system (Galvin, Bylund, & Brommel, 2008, p. 58).
In a family system, Galvin et al. indicate that interpersonal subsystems are present that consist of relationships between the individual and other family members. One example of an interpersonal subsystem is a parental subsystem. According to Seligman and Darling (2007), this subsystem involves interactions between the child and their parents or any individuals who take on a parental role, such as older siblings and extended family members. Furthermore, Seligman and Darling state that the parental subsystem assists in the child’s independence in regard to decision-making, self-direction, and interacting with authority figures.

Communication is important to family systems theory (Barnes & Olson, 1982; 1985; Galvin et al., 2008; Olson, Russell, & Sprenkle, 1983). For example, Olson, Russell, and Sprenkle (1983) suggested that communication allows families to vary in their degree of cohesion and adaptability. Barnes and Olson (1985) reported that parents and adolescents who reported positive communication were more also likely to report higher levels of cohesion, adaptability, and family satisfaction. Galvin et al. further describe the importance of communication in family systems theory by writing

...it is communication that creates, maintains, and changes the system’s reality. Humans act on the social reality they construct through their communication. Individuals in family systems behave according to the meanings they assign to each other, the family, and aspects of the environment (Galvin, Bylund, & Brommel, 2008, p. 69).

The Circumplex Model

Many models that describe family systems include communication as an integral component (Barnes & Olson, 1985). For instance, the Circumplex Model of Marital and Family Systems (Olson, Sprenkle, & Russell, 1979; Olson, 2000) contains three major dimensions where one of the integral components is family communication along with family adaptability, and cohesion (Barnes & Olson). In the Circumplex Model, Olson et al. (1979) refer to cohesion as comprising of two parts consisting of “...[their italics] the emotional bonding members have with
one another and the degree of individual autonomy a person experiences in the family system (p. 5).” In terms of adaptability, Olson et al. (1979) define adaptability in the Circumplex Model as “…[their italics] the ability of a marital/family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress (p. 12).” According to Olson et al. (1979), varying degrees of cohesion and adaptability contribute to describe 16 types of marital and family systems. In a later publication describing the Circumplex Model, Olson (2000) discusses the importance of communication to family adaptability and cohesion where he states that levels of communication allow for varying degrees in family cohesion and adaptability in the Circumplex Model.

Barnes and Olson (1985) point out that the 16 types of families presented in the Circumplex Model can be categorized in groups consisting of balanced, mid-range, and extreme families. Barnes and Olson go to describe that these types of families are based upon varying degrees of cohesion and adaptability, with a balanced family demonstrating the ideal balance between cohesion and adaptability. Using the Parent-Adolescent Communication Scale (PACS) (Barnes & Olson, 1982), Barnes and Olson assessed the Circumplex Model’s claim that positive communication will be more associated with a balanced family system. In total, 426 families participated consisting of a mother, father, and an adolescent in each family. Results suggested that more positive communication was present in balanced families from the parent’s perspective, however was not observed from the adolescent’s point of view. In their conclusions, Barnes and Olson reported that more positive parent-adolescent communication was related to greater family satisfaction, cohesion, and adaptability.

The Importance Parent-Adolescent Communication in Adolescent Development
Positive communication between adolescents and their families has been shown to be important in adolescent development. For example, positive family and parent communication levels have been related to adolescent development in the areas of moral reasoning (Stanley, 1978), identity development (Bhushan & Shirali, 1992; 1993; Cooper, Grotevant, & Condon, 1983) and self-esteem (Birndorf, Ryan, Auinger, Aten, 2005; Walker & Greene, 1986). These studies in regard to self-esteem and identity development will be discussed further below.

Parent-adolescent communication has been shown to be important in the self-esteem of adolescents. For example, Walker and Greene (1986) examined whether relationships with parents and peers, as well as perceptions about other areas such as athletics, school, and popularity were related to self-esteem levels in a sample of 91 adolescents. Walker and Greene used the PACS scale as one of their survey instruments and found that positive parent-adolescent communication was significantly related to self-esteem levels. Also, in their study identifying factors that contribute to high self-esteem in adolescence, Birndorf, Ryan, Auinger, and Aten (2005) reported on longitudinal data collected for adolescents in the 8th, 10th, and 12th grade. Participants completed survey items originally designed to evaluate educational outcomes. Results indicated that positive family communication was a factor in determining self-esteem levels in participants.

Family communication has also been viewed as important in adolescent identity development. For instance, Cooper, Grotevant, and Condon, (1983) investigated 84 adolescents, their siblings, and parents regarding the degree to which communication patterns and levels of connectedness and individuality related to stages of identity development. Results suggested that family communication patterns were related to adolescent levels of identity exploration. Bhushan and Shirali (1992) used the PACS as one of their instruments to investigate different identity
levels in 411 adolescents. Findings indicated that adolescents who reported more open communication with their parents were more likely to demonstrate high identity achievement. In a later study, Bhushan and Shirali (1993) reinforced this connection between identity levels and parent-adolescent communication.

*Communication in Families with a Child with a Disability*

Other researchers have written about communication patterns in families who experience a child with a disability. For instance, Seligman and Darling (2007) provide an extensive description in the area of family systems and children with disabilities. In their book, Seligman and Darling review literature related to family communication patterns with a family member with a disability. Furthermore, Seligman and Darling discuss and review previous research findings that identify that for children with disabilities communication within the context of the family may be problematic. Also, Seligman and Darling note that a lack of discussion about a disability can lead to isolation in siblings of children with a disability and a misconception of the disability. This point is highlighted as Seligman and Darling write, “Family secrets or implicit rules forbidding the discussion of a problem force siblings constantly to pretend that circumstances are other than they seem (p. 254).” Due to the negative consequences of not discussing a disability, Seligman and Darling recommend that families openly communicate about the disability with all members and stress the point that the entire family is affected by a child with a disability.

Luterman (2008) also shares the views of Seligman and Darling (2007) in his writings regarding individuals with communication disorders. In his classic book on counseling approaches in communication disorders, Luterman writes about how a family systems approach to the field of communication disorders could be very beneficial. Luterman goes on to highlight
numerous studies that have acknowledged the benefits of working with families versus the individual in therapy. One of the studies Luterman highlights, by Egolf, Shames, Johnson, and Kasprisin-Burrell (1972), is in the area of parent-child interaction in stuttering therapy. A closer examination of this study indicates that Egolf et al. (1972) studied nine CWS and their parents regarding their interaction styles and ways in which clinicians and parents can modify these behaviors in stuttering treatment. During the evaluation process, Egolf et al. noted aspects of parent-child interactions that best represented the communication between the parent and child. In total, Egolf et al. concluded that the parent-child interactions were lacking spontaneity and consisted of interruptions, questioning by the parents, and at times refusal to discuss certain topics. Egolf et al. believed that these parent-child interactions styles were facilitating stuttering behaviors. Therefore, Egolf et al. indicated that “…the clinician's primary strategy was to disturb this equilibrium by reacting in a manner different from that of the parent (p. 226).” Thus, therapy was conducted in two phases. The first phase consisted of speech therapy sessions conducted by the clinician. Each therapy session was specifically developed to counteract interactions made by the parent and child (i.e. for example, if the parent interrupted the child, the clinician made every effort to never interrupt the child). The second phase of treatment began once a certain level of fluency was achieved. In phase 2, the clinician included the parent into the treatment sessions and worked on transferring the child’s fluency skills into different settings. Additionally, parents modified their speaking patterns in order to facilitate fluent speech. Overall, CWS improved their fluency with their parents as a result of the treatment (Egolf et al., 1972).

Communication between parents and adolescents with other disabilities has also been investigated. For example, Morrison and Zetlin (1988) examined family adaptability, cohesion, and parent-adolescent communication in 30 families of adolescents with learning handicaps and
a control group. Findings indicated that adolescents from both groups (learning-handicapped and no handicap) did not appear to differ significantly regarding perceptions of communication with their parents. However, Morrison and Zetlin found that parents of adolescents with a learning handicap perceived more problematic communication in their families when compared to the control group. Young and Gunderson (1995) studied the self described features of 21 adolescents with borderline personality disorder (BPD) and their parents. Participants with BPD were compared to other adolescents with no BPD. Results indicated that both groups demonstrated low levels of parent-adolescent communication. Also, Clark and Sheilds (1997) explored the relationship between delinquency and parent-adolescent communication in 339 adolescents and found that as open communication levels increase the severity of delinquent acts decreases. In another study, McConnel (1999) studied the impact of a career planning program on 20 adolescents who did and did not have visual impairments. Adolescents were paired with a parents and the parent-adolescent communication scale was used to measure the level of open and problematic communication between adolescents and their parents. Results indicated that adolescent communication with parents improved due to participating in a career program. Finally, Caprara, Regalia, and Bandura (2002) conducted a longitudinal study in a sample of 350 adolescents where they examined the impact that self-regulatory efficacy and parental communication had on violent conduct. Caprara et al. found that open communication levels with parents appeared to decrease the likelihood of adolescents engaging in violent conduct in the short term; however communication did not have a lasting effect on violent behavior at the end of the longitudinal study.
Summary

Due to the important role that communication has in family systems theory, utilizing principles from a systems approach can be helpful when examining how AWS communicate about stuttering with their parents. Communication is present as a variable in many models that describe families, especially the Circumplex Model of Marital and Family Systems (Olson, 2000). In addition, positive levels of communication with parents is important to human development, especially during adolescence, as positive levels of parent-adolescent communication have been associated with high levels of self-esteem and identity achievement (Birndorf et al., 2005; Bhushan & Shirali, 1992; 1993; Cooper et al., 1983; Walker & Greene, 1986). It also has been noted that communication challenges can exist for families who have a child with a disability (Featherstone, 1980 as cited in Seligman & Darling, 2007). However, several studies have reported that positive parent-adolescent communication can assist in decreasing the severity of some problems or disabilities (Caprara et al., 2002; Clark & Shields, 1997). Finally, aspects of family systems theory and communication within the context of the family have been mentioned in the field of communication disorders (Luterman, 2008).

Parent-Adolescent Communication about Stuttering

Parent-child communication about stuttering has been studied sporadically throughout the stuttering literature. Information about how parents and children communicate about stuttering is revealed through literature exploring other questions related to parental reactions to stuttering, the experiences of PWS, and parental involvement in stuttering therapy. The following will consist of a review of literature that addresses the topic of parent-child communication about stuttering. This section will discuss (1) earlier research that addressed parent-child communication about stuttering, (2) qualitative research findings that suggests communication,
or the lack of communication, about stuttering is a recurring theme to PWS, and (3) the recommendations of other researchers that parent-child communication about stuttering

*Early Studies of Parent-Child Communication about Stuttering*

One of the earliest studies that indirectly asked parents how they communicate about stuttering with their child was conducted by Glasner and Rosenthal (1957). In their study, Glasner and Rosenthal were attempting to answer a larger question about how parents diagnose stuttering, and how effective parental treatment was in assisting their child who stuttered. In total, Glasner and Rosenthal conducted interviews with 153 parents of CWS. In their interview protocol, parents of CWS were asked the question “What did you do about it [stuttering]? (Glasner & Rosenthal, p. 291). Participants’ responses were classified into three categories. The first category was characterized by parents taking an active role in correcting their child’s stuttering. Glasner and Rosenthal provided examples such as telling the child to slow down, correcting the child’s speech, and asking the child to stop and repeat a word. A second category consisted of statements that minimized stuttering. For this category, parents indicated that no attention was given to stuttering and these statements were characterized by parents ignoring stuttering and trying to have patience. The third and final category was characterized by parents seeking professional assistance for stuttering. Furthermore, parents in this category did not make any overt comment on how they reacted to stuttering, as they reported deferring to the professional for guidance in how to respond to stuttering.

Another earlier study of parent-child communication was conducted by Johnson and Associates (1959). In their study of 150 parents of CWS, Johnson and Associates reported that the majority of parents had talked about stuttering with their child (Johnson and Associates, 1959 as cited in Yairi, 1997). Similar to Glasner and Rosenthal’s (1957) findings, the majority of these
comments consisted of suggestions for improving their fluency. According to Yairi (1997), these suggestions in the Johnson et al. (1959) findings consisted of “slow down, take it easy, or stop and start over (p. 39).” These same parental suggestions were also noted in an investigation by Dickson (1971). In this study, Dickson was also interested in the remission of stuttering behaviors. However, the majority of parents reported that they provided suggestions to their child to improve their stuttering such as “think before you talk” and “take a deep breath.”

_Lack of Communication about Stuttering_

In a qualitative study with PWS, Corcoran and Stewart (1995) interviewed seven adults who stutter regarding their experiences with positive and negative aspects in dealing with their stuttering. Thematic analysis of the interviews revealed that participants believed that supportive relationships with others, especially other PWS and SLPs, were beneficial to their ability to deal with their stuttering. In contrast, participants reported that their parents did not appear to know how to help them manage their stuttering. Furthermore, professional help was unavailable for some participants. Therefore, as Corcoran and Stewart write, “…the parents and children were left to their own devices, resulting in needless suffering (p. 92).” In addition, quotes provided by participants suggested that stuttering was not discussed in their households.

A few years later, Corcoran and Stewart (1998) conducted a similar qualitative study regarding the experience of PWS. In this study, eight adults who stuttered were interviewed regarding their general, life experiences. Similar to their previous study (Corcoran & Stewart, 1995), thematic analysis was performed on all semi-structured interviews. Results indicated that suffering was the main theme that arose from the interviews. This primary theme consisted of four elements that were characterized by helplessness, shame, fear, and avoidance. In regard to the “shame” category, participants reported many reasons for their experience of shame. Among
these were the influences of listeners’ reactions to their stuttering. These reactions were generally unfavorable, with other listeners being insensitive to their stuttering (laughing or imitating their stuttering). Furthermore, because of feeling shameful about stuttering, many participants felt like they had to hide their stuttering from others (Corcoran & Stewart, 1998).

In a later qualitative study of PWS, Klompas and Ross (2004) explored the life experiences of 16 PWS and the perceived impact that stuttering had on their quality of life. Among the different aspects of life explored, participants were asked to report on the impact of their stuttering on their family life. In regard to family life, Klompas and Ross reported that 7 out of the 16 participants indicated that stuttering had an effect on their relationships with their parents. For these participants, parents were reported to finish sentences, become impatient, and display a lack of understanding regarding stuttering. Klompas and Ross concluded that, as a whole, stuttering did not have an effect on family and marital life. Yet, almost half of their participants reported that stuttering did impact their relationship with their parents.

Hearne et al. (2008) conducted a qualitative study exploring the experiences of adolescents who stutter related to stuttering treatment. Participants included 13 adolescents who stutter, however some younger adults were included in the sample. The analysis of interviews revealed that teachers, peers, and parents did not understand stuttering. Furthermore, participants indicated that they did not talk about stuttering with parents or their friends. In addition, Hearne et al. stated that adolescents who stutter did not want to talk about stuttering with other adolescents. Yet, when stuttering treatment was in the form of group therapy, participants demonstrated more of a willingness to openly discuss their stuttering with others.

More recently, Hughes et al. (2011) explored the family experiences of seven adults who stutter. In this qualitative study, adult participants were asked to reflect on their childhood
experiences with their family related to stuttering. Analyses of the interviews revealed three major themes consisting of support received, support desired, and perceived barriers to support. With respect to the theme of perceived barriers to support, participants reported that stuttering was not discussed openly in their families. Furthermore, what happened in speech therapy was seldom discussed with family members. At the conclusion of their study, Hughes et al. suggested that clinicians encourage families to make stuttering an acceptable topic in the home.

_Clinical Recommendations_

The topic of communication about stuttering is also mentioned in the writing of Rustin and Cook (1995). In their article, Rustin and Cook (1995) described how previous clients have provided statements that imply not only were suggestions provided by parents to improve stuttering (“slow down”, etc.), but a lack of communication about stuttering appeared to exist between parents and children. In an interesting note, Rustin and Cook made a connection between the statements that their previous clients made regarding the lack of communication about stuttering, and how the “conspiracy of silence (p. 127)” about stuttering may have lead to trust issues between parent-child relationships. Finally, Rustin and Cook recommended that parents be involved in the stuttering treatment process.

In addition, Logan and Yaruss (1998) advocated for open discussions between parents and children regarding stuttering. In their writings, Logan and Yaruss described a training program designed to assist parents of CWS by openly acknowledging and discussing stuttering with their child. Logan and Yaruss state that parents can assist in helping their child manage the potential negative emotional aspects related to disorder by openly discussing stuttering. Recommendations consist of techniques in how to respond to your child about stuttering such as
reframing responses, labeling behaviors and feelings, and validating the child’s experiences with stuttering.

In addition to providing clinical recommendations when working with AWS, Zebrowski (2002) speculated about what AWS may really want to work on in speech therapy. In Zebrowski’s experience, AWS may want to work on strategies related to how their stuttering relates to experiences with their parents. In describing this, she writes:

Although adolescents who stutter may believe that they want to make a change in their speech, it may be the case that they really want to change the way they feel about their speech and themselves, or the way their parents feel and think (and act) about their stuttering (Zebrowski, 2002, p. 92).

Finally, in her concluding remarks, Zebrowski reinforces the notion of parent-adolescence communication about various aspects of stuttering, such as therapy involvement, parental support, and the impact that stuttering is having on them. To explain this point, Zebrowski writes:

The moral of this story is that teenagers who stutter need to recognize that they have a responsibility to tell their parents “where they’re at” in terms of their stuttering. What are their concerns? What would they like to do, if anything? How can their parents help them? If this information does not come from the teenager, then the parents are likely to develop a plan of action that may miss the mark entirely and may create conflict in the parent-teenager relationship (Zebrowski, 2002, p.100).

For Zebrowski, it appears that in order to develop a healthy therapeutic relationship with AWS it is important to understand, in some way, the relationships adolescents have with their parents and how AWS talk with their parents about stuttering.

In his clinical experience, Williams (1997) discussed possible reasons why a lack of communication about stuttering may exist between parents and AWS. From a parent’s perspective, Williams indicated that parents may not talk about stuttering because of a belief that talking about stuttering will make their child upset, they do not perceive their child’s stuttering as
a major problem, and they do not understand the problem of stuttering. Moreover, Williams recommended that since stuttering is the adolescent’s problem, it is a good idea for the adolescent to be the one who initiates discussions about stuttering with their parents.

**Summary**

Earlier studies exploring how parents respond to stuttering provides some consistent findings. Although parents did comment on discussing stuttering with their children, these discussions appeared to mainly involve suggestions or advice on how to speak more fluently (Dickson, 1971; Glasner & Rosenthal, 1957; Johnson & Associates, 1959). It is unclear to what extent other topics were addressed, however, from the descriptions provided in these studies, one could draw the conclusion that conversations about stuttering focused on suggestions to improve speech and not the child’s thoughts and feelings about stuttering.

It is interesting to note the recurring theme of communication about stuttering in qualitative studies about stuttering. More specifically, participants report in these studies, to some degree, that stuttering was rarely discussed with parents and other people (Corcoran & Stewart, 1995; 1998; Klompas & Ross, 2004; Hearne et al., 2008; Hughes et al., in press). In some cases, participants actually had a desire to discuss stuttering with others (Hughes et al., in press). Furthermore, recommendations to involve parents into the treatment process, as well as have parents openly discuss stuttering with their child; provide support for further investigations in the area of communication about stuttering (Logan & Yaruss, 1998; Rustin & Cook, 1995). Finally, it has been recommended that AWS talk with their parents about their stuttering and how their parents can assist them (Zebrowksi, 2002, Williams, 1997).
Statement of the Problem

Although there has been extensive research conducted on the speaking behaviors of parents and CWS such as speech rate, turn taking, use of interruptions, and other conversational styles (for review see Gottwald, 1999; Nippold & Rudzinski, 1995; Yairi, 1997), little is known regarding the content of these communication patterns between parents and CWS. In other words, not how do parents and CWS communicate, but what do parents and CWS talk about? Also, little research has addressed the perceptions that people who stutter have regarding the levels of open and problematic communication with their parents. Moreover, the majority of research on parents of people who stutter has been conducted on mothers with little attention given to the communication patterns between fathers and people who stutter (Kelly, 1994).

In addition to exploring general levels of communication between people who stutter and their parents, little is known regarding how people who stutter and their parents communicate about stuttering. Previous literature has suggested that parents have provided advice to their children regarding how to manage stuttering (Dickson, 1971; Glasner & Rosenthal, 1957; Johnson and Associates, 1959), however little is known about the content of these exchanges about stuttering and if these conversations between people who stuttering and their parents are beneficial.

In comparison to adults and children who stutter, little is known regarding the experiences of adolescents who stutter (Schwartz, 1993). Adolescence has been described as a time of transition, presenting challenges both psychologically and socially. For AWS, there may be an additional obstacle during this transition, as stuttering may have an impact on their ability to communicate with others. Despite the available clinical assessments for AWS, there is not a
standardized clinical scale for AWS that measures levels of communication about stuttering with their parents.

It is clear additional research is not only required to investigate communication between PWS and their parents about stuttering, but also on the under-researched population of AWS. Further exploration regarding the perceptions that AWS have about their communication with their mothers and fathers, as well as with other individuals in their environment (friends, siblings) would be beneficial in increasing our understanding of how stuttering is discussed at home, as well as how to incorporate parents of AWS more appropriately in the stuttering therapy process.

Purpose

This study had several purposes related to exploring the experiences of AWS regarding their communication styles with their parents. One of the purposes of the study was to seek a deeper understanding of the experiences of AWS regarding communicating with their parents in general and related to their stuttering. Another purpose of the study was to assist in the development of a clinical scale that would measure adolescents’ communication about stuttering with their parents. As part of the scale development process, qualitative data from interviews was compared with quantitative responses on survey items to assist in the validation process of the scale. Also, this study sought to describe similarities and differences between perceptions that AWS have regarding their communication with their fathers and mothers. Finally, this study wanted to explore the experiences that AWS have communicating about stuttering with individuals besides their parents, such as siblings, friends, and other family members. The following research questions were implemented to help guide the study:
1) What are the experiences that AWS have regarding communicating with their parents about stuttering, speech therapy, the decision to begin speech therapy, and parental assistance with their stuttering?
   - This research question was addressed through the use of a semi-structured interview (qualitative methods)

2) What are the experiences of AWS regarding communicating about stuttering and speech therapy with other individuals (friends, siblings, etc.)?
   - This research question will be addressed through the use of a semi-structured interview (qualitative methods)

3) What are the differences between the perceptions of AWS regarding how they communicate with their fathers and mothers?
   - This will be answered by triangulating qualitative and quantitative data (mixed methods)

4) Are there consistencies between qualitative and quantitative responses from participants in regard to questions related to communicating about various aspects of stuttering with their parents?
   - The triangulating of qualitative and quantitative responses will be used to answer this question (mixed methods)

5) How do AWS rate their perceptions of general communication levels with their parents and how do these reports compare to normative data related to parent-adolescent communication? In addition, how do scores on general communication relate to how participants discuss stuttering with parents? A purpose of this study will be to develop the Communication About Stuttering Inventory (CASI).
• A quantitative scale that measures parent-adolescent communication will be utilized to answer this question and be compared with a communication scale about stuttering (quantitative methods)
CHAPTER III.

METHODS

Design

This study utilized a mixed methods approach in order to understand the experiences of AWS regarding communication with their parents. Burke Johnson and Onwuegbuzie (2004) define mixed methods research “…as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study (p. 17).” In a mixed methods design, the strengths of both qualitative and quantitative methodologies can be used to counteract the limitations that each approach poses (Creswell, 2003). As Creswell, Plano Clark, Gutmann, and Hanson (2003) point out, qualitative and quantitative data can be integrated in a mixed methods design during different phases of the research process. Mixed method research has been used in the stuttering literature to explore the perceptions of others towards various aspects of stuttering and to measure clinical outcomes in stuttering therapy (Gabel, Daniels, Hughes, 2008; Healey, Gabel, Daniels, Kawai, 2007; Hughes, Gabel, Irani, & Schlagheck, 2010; Panico, Healey, Brouwer, Susca, 2005). Also, the use of mixed methodologies to examine perceptions towards stuttering can provide clarification to potential discrepancies observed in qualitative and quantitative responses.

Since this study sought to understand the experiences of AWS regarding communication with their parents using both quantitative and qualitative responses, a concurrent triangulation mixed methods design was chosen. In describing this type of mixed methods design, Creswell et al. (2003) wrote:

This design usually integrates the results of the two methods during the interpretation phase. This interpretation either may note the convergence of the findings as a way to strengthen the knowledge claims of the study or must explain any lack of convergence that may result (p. 229).
Furthermore, Creswell et al. indicate that priority may be given to the qualitative or quantitative approach during a concurrent triangulation design. Greene, Caracelli, and Graham (1989) write that the term triangulation “…refers to the designed use of multiple methods, with offsetting or counteracting biases, in investigations of the same phenomenon in order to strengthen the validity of the inquiry (p. 256).”

**Quantitative Approach**

The quantitative portion of the study consisted of the completion of several questionnaires which included the demographic questionnaire, the CASI, and PACS. Participants provided responses on the CASI and PACS for both their mothers and fathers. Both the CASI and PACS consisted of Likert-type questions. The development of the CASI is an important part of this study.

**Phenomenological Approach to Qualitative Research**

In his writing on qualitative research, Creswell (2007) describes the procedures and characteristics of qualitative research by writing “…qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is inductive and establishes patterns or themes (p. 37).” Creswell also discusses five approaches to qualitative research consisting of narrative research, case study, phenomenology, grounded theory and ethnography. For this study, in order to understand participant experiences with communicating with their parents, priority was given to the qualitative phase in the research design.

This study took a phenomenological approach to qualitative research. In describing this approach, Creswell (2007) writes “…a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon (p. 57).” For this
study, the phenomenon of interest consisted of the experiences that participants had regarding communication with their parents.

**Triangulation of Data**

Once qualitative and quantitative data were analyzed separately, findings from participants’ thematic analysis were compared with scores on the CASI. Any discrepancies in participants’ qualitative and quantitative responses were identified and further explored in the discussion section. When applicable, frequency counts, descriptive statistics, and non-parametric analyses were compared to perceptions of mothers and fathers in the qualitative interview. The comparisons between both types of data contributed to the validity of the CASI as a clinical scale by confirming or identifying discrepancies between qualitative and quantitative responses.

**Participants**

The study incorporated the use of purposeful sampling in an attempt to better understand the experiences of AWS regarding communication with their parents. Creswell (2007) reports that purposeful sampling is a concept observed in qualitative studies and “…that the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study (Creswell, 2007, p. 125).” In addition to the use of purposeful sampling, this study incorporated criterion sampling procedures. This specific type of sampling refers to participants meeting a certain criteria and who have had experience with the phenomenon being explored.

To be considered for the study, participants were required to fit the criteria described below. These criteria took into consideration the age of participants, identification of being an individual who stutters, and their amount of experience with speech therapy for stuttering. These criteria were as follows:
<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Stuttering Severity</th>
<th>Therapy Location</th>
<th>I like the speech therapy I received</th>
<th>The speech therapy I received was helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>“Brad”</td>
<td>17</td>
<td>Male</td>
<td>Caucasian</td>
<td>Moderate</td>
<td>Both in school and out of school</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#2</td>
<td>“Amy”</td>
<td>12</td>
<td>Female</td>
<td>Caucasian</td>
<td>Mild</td>
<td>Both in school and out of school</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#3</td>
<td>“Jack”</td>
<td>12</td>
<td>Male</td>
<td>African American</td>
<td>Moderate</td>
<td>Both in school and out of school</td>
<td>Strongly Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#4</td>
<td>“Leo”</td>
<td>12</td>
<td>Male</td>
<td>Hispanic/Latino</td>
<td>Moderate</td>
<td>Both in school and out of school</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>#5</td>
<td>“Bill”</td>
<td>13</td>
<td>Male</td>
<td>Caucasian</td>
<td>Moderate</td>
<td>Outside of school</td>
<td>Agree</td>
<td>Neither Disagree or Agree</td>
</tr>
<tr>
<td>#6</td>
<td>“Arthur”</td>
<td>17</td>
<td>Male</td>
<td>Caucasian</td>
<td>Severe</td>
<td>Outside of school</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#7</td>
<td>“Jim”</td>
<td>14</td>
<td>Male</td>
<td>Caucasian</td>
<td>Moderate</td>
<td>Outside of school</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>#8</td>
<td>“Molly”</td>
<td>15</td>
<td>Female</td>
<td>Caucasian</td>
<td>Moderate</td>
<td>Outside of school</td>
<td>Strongly Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#9</td>
<td>“Drew”</td>
<td>12</td>
<td>Male</td>
<td>Caucasian</td>
<td>Mild</td>
<td>Both in school and out of school</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>#10</td>
<td>“Tyler”</td>
<td>16</td>
<td>Male</td>
<td>Caucasian</td>
<td>Mild</td>
<td>Outside of school</td>
<td>Strongly Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
1) Participants were required to be an individual who stutters.

2) Participants were between the ages of 12 and 17 years of age. Other studies have included similar age ranges for adolescents who stutter (Blood et al., 2001; Blood et al., 2003). Therefore, by using this age range it allowed for comparisons between data to remain somewhat consistent. Also, one of the research instruments, the PACS (Barnes & Olson, 2003), provided the suggested ages for use as 12 to 20 years of age. Therefore, the ages proposed would complement the suggested ages used in the PACS.

3) Participants were required to have been enrolled in speech therapy for stuttering at some time in their life.

Participants were recruited from a variety of sources that included speech-language pathologists and Board Recognized Specialists in Fluency Disorders. These individuals were initially contacted over email or phone and asked to help identify parents of AWS who fit the above requirements. This was done using a recruitment letter delivered over email that contained information describing the study (Appendix A). Speech-language pathologists (SLPs) and Board-Recognized Specialists in Fluency Disorders then provided information about the study to parents of potential participants. If parents were interested in allowing their child to participate, they were asked to contact the primary researcher, or have the individual who approached them about the study contact the primary researcher on their behalf to schedule a time to meet and review the parental consent document.

A total of 10 participants were recruited for the study, consisting of 8 males and 2 females. It is noted this ratio of males to females is consistent with gender differences reported in the stuttering literature (Bennett, 2006; Guitar, 2006). The mean age of participants was 14 years
of age. Table 1 describes the demographics of the participants. The participants reported a variety of stuttering severities, as well as attending speech therapy both in school and in an outside setting. For the most part, participants were satisfied with the speech therapy they received and believed the treatment provided to them was helpful.

Procedures

Once parents of potential participants expressed interest in allowing their child to participate, the primary researcher contacted parents either by phone or e-mail to schedule a time to meet in person and review the consent document. After parents provided their written consent to allow their child to participate (Appendix B), the primary researcher reviewed the assent document with potential participants in person. If participants were willing to participate and had no further questions, they provided their written assent (Appendix C). When parents and participants provided their written consent and assent, the study began with the primary researcher and participant going to a private location. During this time, the primary researcher distributed the questionnaires and was available to answer any questions. The primary researcher made the decision to have participants complete the questionnaires first as a way to allow them to begin thinking about how they communicate with their parents about stuttering. Furthermore, the primary researcher believed that by having participants complete the questionnaires first, it would allow for a smoother transition into the interview portion of the study. After participants completed the questionnaires, the primary researcher began the semi-structured interview.

Both quantitative and qualitative instruments were used in the data collection process. These instruments included (1) a demographic questionnaire, (2) the PACS, (3) the CASI, and (4) a semi-structured interview protocol. These instruments are described below in the order in which they are numbered.
Demographic Questionnaire

A demographic questionnaire (Appendix D) was used to collect information related to participant’s age, gender, ethnicity, stuttering severity, experiences with speech therapy, perceived effectiveness of speech therapy, and information about the person they most identify as being their mother and father. This information helped to supplement and interpret findings related to the participants’ communication with parents.

Decisions regarding what items to include in the demographic questionnaire were influenced by reviewing studies related to AWS in regard to their experiences, communication about stuttering, and perspectives on parental involvement (Corcoran & Stewart, 1995; 1998; Hearne et al., 2008, Hughes, et al., 2011, Klompas & Ross, 2004; Logan & Yaruss, 1998; Manning, 2003; Rustin & Cook, 1995; Zebrowski, 2002). A preliminary review of the literature related to parent-adolescent communication was also incorporated into the creation of items in the demographic questionnaire (Barnes & Olson, 2003; Galvin, Bylund, & Brommel 2008). At the conclusion of this review, it was determined that questions regarding age, gender, and self-reported stuttering severity were commonly used in these studies. Therefore, these questions were included in the demographic questionnaire as they appeared standard for this type of research. In addition, questions were included that requested participants to describe the setting in which they received speech therapy services (school, private practice, both). This information was included to provide further context in which speech therapy services were delivered and how that may relate to parental involvement in stuttering therapy. Also, it was acknowledged that some participants may come from blended families and may not have two biological parents. As a result, questions were included that asked participants to identify the person in which they considered to be their mother and father (i.e., mother, father, grandmother, uncle, etc.). This was
also acknowledged in the directions of the CASI and the PACS versions, as participants are
instructed to complete the questions with the individual with whom they most identified with as
being their mother and father. The primary researcher was on-site to answer questions related to
the directions. To assure the general readability of the demographic questionnaire, a group of 10
students who do not stutter between the ages of 10 and 11 years of age read through the
demographic questionnaire and were asked to identify any items or wording that were confusing.
The feedback from this group of 10 students was taken into consideration when determining the
wording of demographic items.

Parent-Adolescent Communication Scale (PACS)

The PACS (Barnes & Olson, 2003) measures adolescents’ perceptions regarding the
levels of open, problematic, and selective communication with their parents. Participants were
asked to complete the adolescent forms on the PACS related to their mother (Appendix E) and
father (Appendix G). Initially developed by Barnes and Olsen (1982), the PACS has been
through several editions and demonstrates good psychometric properties. The most current
version of the PACS was used for this study (Barnes & Olson, 2003). The PACS is a 20-item
survey instrument used to measure open, problematic, and selective communication between
adolescents and their parents. For the purposes of the proposed study, only adolescents’
perceptions were studied. Therefore, only the adolescent form of the scale was used. The PACS
adolescent form (for both mother and father) is divided into two sections (10 questions in each
section) consisting of “Open Family Communication” and “Problems in Family
Communication.” Barnes and Olson (1982) noted that both of these subscales demonstrated
alpha reliability ratings of .87 and .78. The open communication subscale deals with more
positive aspects of communication such as information exchanges in conversations, the amount
of understanding, and how satisfying the communication experience is for adolescents (Barnes & Olson, 1982). In contrast, the problem communication subscale concentrates more on negative aspects of interactions such as reluctance to share information, detrimental interaction styles, and caution in disclosing information (Barnes & Olson, 1982). The PACS has been used extensively in other disciplines. For example, the PACS has been utilized in studies that have investigated individuals with learning disabilities, relationship stress of middle-aged fathers and adolescent children, the family attributes of adolescents with borderline personality disorders, adolescent delinquent behaviors, adolescent self-esteem in adoptive, non-adoptive, and separated families, adolescents with visual impairments, self-regulatory efficacy and violent conduct, adolescents in Italian families that are either in a foster, inter-country, or biological families, and communication about sexual behavior (Caprara, Regalia, & Bandura, 2002; Clark & Shields, 1997; Julian, McKenry, & McKelvey, 1991; Lanz, Iafrate, Rosnati, & Scabini, 1999; McConnel, 1999; Morrison & Zetlin, 1988; Sales, Milhausen, Wingood, DiClemente, Salazar, & Crosby, 2008; Rosnati, Iafrate, and Scabini, 2007; Young & Gunderson, 1995).

Communication about Stuttering Inventory (CASI)

The third and final scale, the Communication about Stuttering Inventory (CASI), examined the level of communication about various aspects of stuttering. This scale was developed as part of this study and explored the extent to which AWS discussed various topics related to stuttering with their parents. Topics covered on the CASI included the level of comfort, satisfaction, and understanding related to conversations about stuttering. Also, the CASI asked information regarding the extent to which AWS discuss their thoughts, feelings, and speech therapy experiences with their parents.
As with any study focusing on scale development, certain procedures were conducted to assure the CASI was a valid and reliable measure. Similar to procedures used for the demographic questionnaire, the same group of 10 students from the 4th and 5th grade who did not stutter provided general feedback regarding the readability of survey items on the CASI. The comments and suggestions made by the group of elementary school-aged students were taken into consideration during the wording and presentation of survey items and the direction prior to administering the scales to participants. During the data collection process, the primary researcher also asked participants to provide their feedback regarding the readability of the scale. Their suggestions and comments will be taken into consideration in future versions of the CASI.

In order to establish content validity, a review of the literature was conducted to determine relevant questions. According to Creswell (2003), content validity refers to the level in which questions actually measure the intended purpose of the study. This literature consisted of earlier studies of parents of CWS, reviews and recommendations when working with AWS, and qualitative research in stuttering that reported a lack of communication about stuttering with family members (Corcoran & Stewart, 1995; 1998; Dickson, 1971; Glasner & Rosenthal, 1957, Hearne et al., 2008; Hughes et al., 2011; Manning; 2003, Johnson & Associates, 1959; Klompas & Ross, 2004; Rustin & Cook, 1995; Logan & Yaruss, 1998; Zebrowski, 2002). From this review, survey items were created that dealt with different aspects of stuttering that consisted of the level of communication about stuttering, the extent to which adolescents talked about their feelings and thoughts about stuttering, and parental involvement in stuttering therapy. Professionals in stuttering therapy who work with AWS were also consulted regarding survey items. Also, the PACS guided the presentation and organization of both mother (Appendix F)
and father version (Appendix H) of the CASI (Barnes & Olson, 1982; 1985; 2003). Finally, the information from the semi-structured interviews was used to inform the final format of the CASI.

Semi-Structured Interview

The semi-structured interview was guided by seven questions with each question containing planned prompts (see Appendix I). The interview questions were adapted and modified to fit the purpose of the current study from other interview protocols that have been observed in qualitative studies of individuals who stutter (Corcoran & Stewart, 1995; 1998, Hearne et al., 2008; Klompas & Ross, 2004; Plexico, Manning & DiLollo, 2005). The interview questions were also influenced by findings related to disclosure of stuttering in AWS and other individuals who stutter (Corcoran & Stewart, 1995; 1998; Hearne, et al., 2008; Hughes, et al. 2011; Blood et al., 2003). The open-ended questions allowed for participants to fully discuss their experiences communicating about stuttering with not only their parents, but also with other family members and friends.

Analysis

Qualitative Data

The following step-wise procedures are outlined by Creswell (2003) and were used for the analysis of the participants’ interviews:

1. All interviews will be audio recorded and transcribed verbatim.

2. Once the interviews were transcribed, the transcripts were read through in their entirety. This initial reading allowed the primary research to get a sense of the data and begin to generate thoughts and impressions of the data. These general thoughts were recorded in the margin of the transcripts and in fields notes accumulated throughout the data collection process.
3. Once general thoughts regarding the transcripts were recorded, the primary researcher read through each transcript and assigned a code that described each statement made by the participant.

4. These codes were grouped into major and minor themes. A major theme consisted of an experience that was shared amongst the majority of participants and was collectively shared and observed in the narratives of participants. Minor themes were viewed as contributing to the formation of the major theme experienced by participants.

*Credibility*

Several procedures were implemented to assure results from the qualitative data were credible. Creswell (2003; 2007) discusses several procedures that can be implemented to in qualitative research to assure that findings are credible. This study used procedures outlined by Creswell and consisted of the primary researcher becoming aware of potential biases, extended time spent with participants, and revisiting participants to summarize the interviewer’s interpretation of their transcripts. The following is a description of these procedures.

One technique implemented to assure credible findings was increasing awareness of potential biases. At the time of the study, the primary researcher was a speech-language pathologist and a person who stutters. In order to become aware of potential biases related to his experiences as a person who stutters, the primary researcher was interviewed using the semi-structured interview protocol and was asked to respond to questions retrospectively in regard to the time period being explored (ages of 12 to 17). Once the interview was completed, the primary researcher transcribed his interview and conducted a thematic analysis on his own transcript. Finally, the primary researcher reported and discussed the findings of his thematic analysis with one other researcher involved in the reliability process. During these discussions,
the primary researcher made notes regarding his experiences to assist in safeguarding against potential biases when analyzing participants’ transcripts.

Another technique used to assure the findings were credible consisted of a procedures in qualitative research known as member checking, which refers to the process of checking interpretations of qualitative data with participants (Creswell, 2003). The primary researcher checked his interpretations of the narratives at periodic times during the interviews with each participant. Also, at the conclusion of each interview, the primary researcher provided a general summary of participants’ narratives and requested clarification from participants regarding his interpretations. This general summary was completed with nine out of the ten participants.

Reliability

In order to assure the consistency in the interpretation of the qualitative data, the primary researcher incorporated two other researchers into the analysis process of the qualitative data. These two researchers assisted in the procedures for inter-judge reliability. The second researcher was an associate professor with experience in the area of stuttering and qualitative research. This researcher was provided with participants’ transcripts and progressed through the step-by-step analysis process along with the primary researcher. Once both these researchers coded and analyzed the interviews, they met and shared their perceptions regarding the interviews and reached a consensus regarding the thematic structure. After a consensus was reached, a third independent researcher was incorporated to provide his perceptions regarding the thematic structure of participants’ interviews. Similar to the second researcher, this individual was an assistant professor in the area of stuttering and had experience with qualitative research. Both the second and third researchers were provided with statements that comprised all themes represented in participants’ interviews. The primary researcher coded participant statement on
two separate occasions to assure intra-rater reliability. Each of the researchers coded participants’ quotes for thematic structure. Pearson correlations were performed between the primary researcher first coding of statements with both researchers (as well the primary researcher’s second coding) to determine if a significant positive correlation exists for responses. In addition, a Sander’s measure of agreement (Sanders, 1961) was performed to determine the level of agreement between all researchers. Results of these reliability procedures are presented in Table 2. The Sander’s agreement score yielded > 90% agreement amongst all researchers regarding minor and major theme structure. In addition, with the exception of one correlation (Primary researcher compared to third researcher regarding major themes r = .897), all correlations were > .9 significance.
Table 2

*Sander’s Agreement Scores and Correlations Between Researchers*

<table>
<thead>
<tr>
<th>Comparisons</th>
<th>Sander’s Agreement Score</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Research (Intra-rater reliability)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Themes</td>
<td>100%</td>
<td>1.000</td>
</tr>
<tr>
<td>Minor Themes</td>
<td>100%</td>
<td>1.000</td>
</tr>
<tr>
<td>Primary Research/Second Researcher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Themes</td>
<td>98.14%</td>
<td>0.993</td>
</tr>
<tr>
<td>Minor Themes</td>
<td>100%</td>
<td>1.000</td>
</tr>
<tr>
<td>Primary Research/Third Researcher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Themes</td>
<td>90.74%</td>
<td>0.897</td>
</tr>
<tr>
<td>Minor Themes</td>
<td>96.29%</td>
<td>0.925</td>
</tr>
<tr>
<td>Second Research/Third Researcher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Themes</td>
<td>90.74%</td>
<td>0.929</td>
</tr>
<tr>
<td>Minor Themes</td>
<td>96.29%</td>
<td>0.925</td>
</tr>
</tbody>
</table>
Quantitative Data

Total scores were obtained for responses on the CASI and PACS. The demographic questionnaire was used to supplement and provide context to the quantitative data. Total scores on the PACS were compared to normative data for perceptions of mothers (mean = 66.56, s.d. = 12.10) and fathers (mean = 63.74, s.d = 12.02). Non-parametric statistical analyses were performed on questionnaires which consisted of Spearman Correlations and Wilcoxon Sign Tests. Spearman Correlations were performed on total scores between the CASI and PACS to determine if a relationship existed between these questionnaires for mothers and fathers. In addition, Wilcoxon Sign Tests were performed for total score on the CASI and PACS to determine if significant differences were present for mother and father responses. Descriptive statistics including means, standard deviations, and frequency counts were also used to describe participant responses, as well as supplement the non-parametric statistical analyses. This analysis also allowed for initial reliability and validity measures for the newly developed CASI, and will inform future studies to further develop this instrument for research and clinical use.
CHAPTER IV.

RESULTS

The following section describes the findings of the quantitative and qualitative data. The quantitative data are discussed first, followed by the qualitative results. A number of tables have been used to assist in presenting the results.

Quantitative Data

This section reports the data and analysis related to the PACS and CASI scales. To organize these results, the findings are presented related to the descriptive statistics for (1) the mother and father versions on the PACS along with overall scores for individual participants, (2) descriptive information for the mother and father version of the CASI with overall scores, (3) a description of Spearman correlations performed between total scores on the PACS and CASI, and (4) findings related to the Wilcoxon Sign Test comparing responses for mother and fathers on the PACS and CASI.

*Parent Adolescent Communication Scale*

The following section reports frequency counts related to each item on the PACS for both mother and father versions. Mean scores for individual items will also be discussed in regard to mothers and fathers. Finally, individual overall scores on the PACS will be reported and compared to normative data.

*Responses for PACS Individual Items*

Table 3 presents the frequency counts, means, and standard deviations for each PACS item in regard to mother and fathers. In this section, each item on the PACS will be presented individually. Standard deviations are presented in parenthesis after the mean scores are reported. For item 1 related to mothers, one participant neither agreed or disagreed and nine participants
moderately agreed or strongly agreed for a mean score of 4.20 (0.63). In regard to fathers on item 1, two participants either strongly disagreed or moderately disagreed and eight participants either moderately agreed or strongly agreed for a mean score of 3.90 (1.37).

On item 2 for the mother version, four participants either strongly disagreed or moderately disagreed, four participants neither agreed nor disagreed, and two participants moderately agree. These responses yielded a mean score of 2.50 (1.17). For item 2 related to fathers, six participants either strongly disagreed or moderately disagreed, two participants neither agreed or disagreed and two participants either moderately agreed or strongly agreed for a mean score of 2.50 (1.26).

Item 3 for the mother version, two participants moderately disagreed and eight participants either moderately agreed or strongly agreed for a mean score of 3.80 (1.03). The father scores for item 3 indicated that one participant neither disagreed nor agreed and nine participants either moderately agreed or strongly agreed for a mean score of 4.30 (0.67).
Table 3
Frequency counts and descriptive statistics for Parental Adolescent Communication Scale items

<table>
<thead>
<tr>
<th>Item</th>
<th>Mother</th>
<th>Father</th>
<th>Mean(s.d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can discuss my beliefs with my mother/father without feeling restrained or embarrassed.</td>
<td></td>
<td></td>
<td>4.20(0.63)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.90(1.37)</td>
</tr>
<tr>
<td>2. Sometimes I have trouble believing everything my mother/father tells me.</td>
<td>4.20(1.17)</td>
<td>2.50(1.26)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My mother/father is always a good listener.</td>
<td></td>
<td></td>
<td>3.80(1.03)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.30(0.67)</td>
</tr>
<tr>
<td>4. I am sometimes afraid to ask my mother/father for what I want.</td>
<td></td>
<td></td>
<td>2.40(1.50)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.10(1.28)</td>
</tr>
<tr>
<td>5. My mother/father has a tendency to say things to me which would be better left unsaid.</td>
<td></td>
<td></td>
<td>3.10(1.44)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.50(1.35)</td>
</tr>
<tr>
<td>6. My mother/father can tell how I’m feeling without asking.</td>
<td></td>
<td></td>
<td>3.60(1.17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.20(1.13)</td>
</tr>
<tr>
<td>7. I am very satisfied with how my mother/father and I talk together.</td>
<td></td>
<td></td>
<td>3.90(0.99)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.90(1.19)</td>
</tr>
<tr>
<td>8. If I were in trouble, I could tell my mother/father.</td>
<td></td>
<td></td>
<td>4.60(0.51)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.90(1.28)</td>
</tr>
</tbody>
</table>
Table 3
*Frequency counts and descriptive statistics for Parental Adolescent Communication Scale items continued*

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
<th>Mean(s.d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. I openly show affection to my mother/father.</td>
<td>Mother 0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4.00(0.81)</td>
</tr>
<tr>
<td></td>
<td>Father 0</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>3.80(0.91)</td>
</tr>
<tr>
<td>10. When we are having a problem, I often give my mother/father the</td>
<td>Mother 2</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2.30(1.31)</td>
</tr>
<tr>
<td>silent treatment.</td>
<td>Father 4</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>2.50(1.58)</td>
</tr>
<tr>
<td>11. I am careful about what I say to my mother/father.</td>
<td>Mother 0</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>3.70(1.25)</td>
</tr>
<tr>
<td></td>
<td>Father 0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.30(0.82)</td>
</tr>
<tr>
<td>12. When talking to my mother/father, I have a tendency to say things</td>
<td>Mother 2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2.90(1.37)</td>
</tr>
<tr>
<td>that would be better left unsaid.</td>
<td>Father 1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>2.80(0.91)</td>
</tr>
<tr>
<td>13. When I ask questions, I get honest answers from my mother/father.</td>
<td>Mother 1</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>4.10(1.28)</td>
</tr>
<tr>
<td></td>
<td>Father 0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>4.40(0.69)</td>
</tr>
<tr>
<td>14. My mother/father tries to understand my point of view.</td>
<td>Mother 0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>4.20(1.22)</td>
</tr>
<tr>
<td></td>
<td>Father 1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3.70(1.33)</td>
</tr>
<tr>
<td>15. There are topics I avoid discussing with my mother/father.</td>
<td>Mother 1</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>2.80(1.31)</td>
</tr>
<tr>
<td></td>
<td>Father 0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3.70(0.94)</td>
</tr>
<tr>
<td>16. I find it easy to discuss problems with my mother/father.</td>
<td>Mother 0</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>3.80(0.91)</td>
</tr>
<tr>
<td></td>
<td>Father 1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>2.90(0.99)</td>
</tr>
<tr>
<td>Item</td>
<td>Mother</td>
<td>Father</td>
<td>Mother</td>
<td>Father</td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
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<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>17. It is very easy for me to express all my true feelings to my mother/father.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18. My mother/father nags/bothers me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19. My mother/father insults me when she is angry with me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20. I don’t think I can tell my mother/father how I really feel about some things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
In regard to mothers on item 4, seven participants either strongly disagreed or moderately disagreed, one participant neither agreed or disagreed and two participants strongly agreed that produced a mean score of 2.40 (1.50). In contrast, in item 4 for fathers three participants either strongly disagreed or moderately disagreed, four participants neither agreed or disagreed, and three participants moderately agreed or strongly agreed, which yielded a mean score of 3.10 (1.28).

On item 5 for mothers, four participants either strongly disagreed or moderately disagreed, three participants neither agreed nor disagreed, and three participants strongly agreed for a mean score of 3.10 (1.44). In respect to fathers on item 5, eight participants either strongly disagreed or moderately disagreed and two participants strongly agreed, which produced a mean score of 2.50 (1.35).

Scores on item 6 for mothers indicated that one participant strongly disagreed, three participants neither agreed nor disagreed, and six participants either moderately agreed or strongly agreed for a mean score of 3.60 (1.17). For father on item 6 there were two participants that either strongly disagreed or moderately disagreed, four participants neither agreed nor disagreed, and four participants moderately agreed or strongly agreed. The mean score for fathers on item 6 was 3.20 (1.13).

Item 7 for mothers indicated that one participant moderately disagreed, two participants neither agreed nor disagreed, and seven participants either moderately agreed or strongly agreed for a mean score of 3.90 (0.99). For fathers, there was one participant who strongly disagreed, one that neither agreed nor disagreed, and eight that either moderately agreed or strongly agreed. These responses for fathers produced a mean score of 3.90 (1.19).
Responses on item 8 for mothers indicated that ten participants either moderately agreed or strongly agreed. These responses produced a mean score of 4.60 (0.51). In respect to fathers on item 8, one participant strongly disagreed, two participants neither disagreed nor agreed, and seven participants either moderately agreed or strongly agreed. These responses for fathers on item 8 yielded a mean score of 3.90 (1.28).

For item 9 in regard to mothers, three participants neither agreed or disagreed and seven participants either moderately agreed or strongly agreed, which yielded a mean score of 4.00 (0.81). In respect to fathers on this item, there was one participant that moderately disagreed, two participants that neither agreed nor disagreed, and seven participants that either moderately agreed or strongly agreed. The responses on this item for fathers yielded a mean score of 3.80 (0.91).

Item 10 in regard to mothers indicated that seven participants either strongly disagreed or moderately disagreed, one participant neither agreed nor disagreed, and two participants moderately agreed. These responses produced a mean score of 2.30 (1.31). In contrast, for responses related to fathers on this item there were five participants that either strongly disagreed or moderately disagreed, three participants neither agreed nor disagreed, and two participants strongly agreed, which indicated a mean score for fathers of 2.50 (1.58).

On item 11 related to mothers, two participants moderately disagreed, three participants neither agreed nor disagreed, and five participants either moderately agreed or strongly agreed for a mean score of 3.70 (1.25). Conversely, responses for fathers on this item indicated that two participants that neither agreed nor disagreed and eight participants that moderately agreed or strongly agreed for a mean score of 4.30 (0.82).
The responses for mothers on item 12 indicated that four participants strongly disagreed or moderately disagreed, two participants neither agreed nor disagreed, and four participants moderately agreed or strongly agreed. All together, these responses produced a mean score of 2.90 (1.37). For fathers on this item, three participants strongly disagreed or moderately disagreed, five neither agreed nor disagreed, and two moderately agreed. These responses indicated a mean score for fathers of 2.80 (0.91).

Item 13 for mothers indicated that one participant strongly disagreed, one neither agreed nor disagreed, and eight moderately agreed or strongly agreed for a mean score of 4.10 (1.28). Responses for fathers on item 13 indicated that one participant neither agreed nor disagreed and nine moderately agreed or strongly agreed for a mean score of 4.40 (0.69).

Scores for mothers on item 14 showed that two participants moderately disagreed and eight participants moderately agreed or strongly agreed. These responses produced a mean score of 4.20 (1.22). In regard to fathers, responses indicated two participants strongly disagreed or moderately disagreed, one neither agreed nor disagreed, and seven moderately agreed or strongly agreed for a mean score of 3.70 (1.33).

For item 15 for mothers, there were five participants that strongly disagreed or moderately disagreed, three that neither agreed or disagreed, and two that strongly agreed, which produced a mean score of 2.80 (1.31) for this item. In regard to fathers on item 15, there consisted one participant that moderately disagreed, three neither agreed nor disagreed, and six moderately agreed or strongly agreed. These scores indicated a mean score of 3.70 (0.94) for fathers on item 15.

The mother scores on item 16 indicated that one participant moderately disagreed, two neither agreed nor disagreed, and seven moderately agreed or strongly agreed for a mean score of
3.80 (0.91). In respect to fathers for item 16, three participants strongly disagreed or moderately disagreed, four neither agreed nor disagreed, and three moderately agreed for a mean score of 2.90 (0.99).

Item 17 for mothers showed that two participants moderately disagreed, one neither agreed nor disagreed, and seven moderately agreed or strongly agreed. These responses yielded a mean score of 3.70 (1.05). In contrast, responses for fathers on this item yielded five participants that strongly disagreed or moderately disagreed and five neither agreed nor disagreed, which produced a mean score of 2.20 (0.91).

Responses in regard to mothers on item 18 indicated that five participants strongly disagreed or moderately disagreed, two neither agreed nor disagreed, and three moderately agreed or strongly agreed which indicated a mean score of 2.80 (1.47). For fathers on item 18, responses indicated that seven participants strongly or moderately disagreed, two neither agreed nor disagreed, and one strongly agreed. These responses suggested a mean score of 2.10 (1.28).

Scores for the mother version on item 19 showed seven participants strongly disagreed, one neither agreed nor disagreed, and two strongly agreed. These responses produced a mean score of 2.00 (1.69). For responses according fathers, seven participants strongly or moderately disagreed, one neither agreed nor disagreed, and two strongly agreed. These scores produced a mean score of 2.10 (1.66).

For item 20 regarding mothers, three participants strongly or moderately disagreed, three neither agreed nor disagreed, and four moderately and strongly agreed. These responses showed a mean score of 3.00 (1.33). On item 20 related to fathers, five participants strongly or moderately disagreed, two neither agreed nor disagreed, and three moderately or strongly agreed. These responses yielded a mean score of 2.70(1.33).
Overall Scores on PACS

Table 4 describes the total scores on the PACS and CASI, as well as total scores for the open and problematic subscale on the PACS for individual participants. A score of 50 indicates the highest level of agreement for the open and problematic subscales respectively. These two subscales are then added to produce a total score for the PACS. The PACS provides normative data in regard to total scores that falls within five distinct categories consisting of “very low” (52-63), “low” 64-69”, “moderate” 70-79, “high” 80-85, and “very high” 86-100.

In regard to perceptions towards mothers, two participants demonstrated scores that were within the “very low” category for communication, one participant demonstrated a score in the “low” category, four demonstrated total scores within the “moderate” category, two were in the “high” category, and one produced a score that fell within the “very high” category. When compared to normative data for PACS total scores, nine participant scores fell within one standard deviation of the mean (mean = 66.56, s.d. = 12.10) and one participant’s score (Jim) scored within one standard deviation higher of the mean.

For scores in respect to fathers, two participants demonstrated total scores in the “very low” category, one participant produced a total score in the “low” category, and seven produced total scores that fell within the “moderate” category. Eight participants’ scores fell within one standard deviation of the mean related to normative data (mean = 63.74, s.d. = 12.02), one participant (Molly) produced a total score below the normative data, and one participant (Jim) yielded a total score above the mean.
Table 4
Total scores for individual participants on PACS and CASI

<table>
<thead>
<tr>
<th></th>
<th>PACS Open</th>
<th>PACS Problematic</th>
<th>PACS Total</th>
<th>CASI Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P#1 “Brad”</td>
<td>Mother: 36</td>
<td>Father: 28</td>
<td>70</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Mother: 34</td>
<td>Father: 35</td>
<td>63</td>
<td>23</td>
</tr>
<tr>
<td>P#2 “Amy”</td>
<td>Mother: 45</td>
<td>Father: 39</td>
<td>86</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Mother: 41</td>
<td>Father: 35</td>
<td>74</td>
<td>45</td>
</tr>
<tr>
<td>P#3 “Jack”</td>
<td>Mother: 46</td>
<td>Father: 40</td>
<td>67</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Mother: 21</td>
<td>Father: 28</td>
<td>68</td>
<td>56</td>
</tr>
<tr>
<td>P#4 “Leo”</td>
<td>Mother: 45</td>
<td>Father: 44</td>
<td>71</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Mother: 26</td>
<td>Father: 27</td>
<td>71</td>
<td>50</td>
</tr>
<tr>
<td>P#5 “Bill”</td>
<td>Mother: 36</td>
<td>Father: 38</td>
<td>72</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Mother: 36</td>
<td>Father: 36</td>
<td>74</td>
<td>43</td>
</tr>
<tr>
<td>P#6 “Arthur”</td>
<td>Mother: 42</td>
<td>Father: 40</td>
<td>73</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Mother: 31</td>
<td>Father: 32</td>
<td>72</td>
<td>49</td>
</tr>
<tr>
<td>P#7 “Jim”</td>
<td>Mother: 44</td>
<td>Father: 41</td>
<td>85</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Mother: 41</td>
<td>Father: 37</td>
<td>78</td>
<td>50</td>
</tr>
<tr>
<td>P#8 “Molly”</td>
<td>Mother: 30</td>
<td>Father: 20</td>
<td>58</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Mother: 28</td>
<td>Father: 14</td>
<td>34</td>
<td>18</td>
</tr>
<tr>
<td>P#9 “Drew”</td>
<td>Mother: 30</td>
<td>Father: 37</td>
<td>57</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Mother: 27</td>
<td>Father: 38</td>
<td>75</td>
<td>27</td>
</tr>
<tr>
<td>P#10 “Tyler”</td>
<td>Mother: 45</td>
<td>Father: 35</td>
<td>85</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Mother: 40</td>
<td>Father: 35</td>
<td>70</td>
<td>33</td>
</tr>
</tbody>
</table>
Communication about Stuttering Inventory

Individuals item responses on the CASI for mother and fathers are presented in Table 5. Frequency counts for each type of response, as well as means and standard deviations are presented in Table 6. Similar to the previous section, each item and type of response will be reported in the subsequent section.

Responses for CASI Individual Items

On item 1 in relation to mothers there were two participant that neither agreed or disagreed and eight that moderately or strongly agreed, which produced a mean score of 4.00 (0.66) for the mother responses. In regard to fathers on item 1, there were four participants that strongly or moderately disagreed, two that neither agreed nor disagreed, and four who moderately or strongly agreed with the statement. These responses demonstrated a mean score of 2.90 (1.37).

Responses on item 2 for mothers showed one participant who strongly disagreed, two that neither agreed nor disagreed, and seven that moderately or strongly agreed. These responses indicated a mean score of 4.00 (1.33). Father responses on item 2 yielded two participants that strongly disagreed, three neither agreed nor disagreed, and five that moderately or strongly agreed. Responses for fathers showed a mean score of 3.40 (1.50).

For item 3, responses for mothers indicated that two participants strongly or moderately disagreed, three neither agreed nor disagreed, and five moderately or strongly agreed. These responses suggested a mean score of 3.40 (1.26). In contrast, responses related to fathers showed three participants that strongly or moderately disagreed, one who neither agreed or disagreed, and six that moderately or strongly agreed, which indicated mean score of 3.30 (1.25).
Table 5  
*Frequency counts and descriptive statistics for CASI items*

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
<th>Mean(s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My mother/father and I talk about my stuttering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 0 0 2</td>
<td>Father 2 2 3</td>
<td></td>
<td>6 2</td>
<td></td>
<td>4.00(0.66)</td>
</tr>
<tr>
<td>2. I feel comfortable talking with my mother/father about my stuttering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 1 0 2</td>
<td>Father 2 0 3</td>
<td></td>
<td>2 3</td>
<td></td>
<td>4.00(1.33)</td>
</tr>
<tr>
<td>3. The talks I have with my mother/father about my stuttering are helpful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 1 1 3</td>
<td>Father 1 2 1</td>
<td></td>
<td>5 1</td>
<td></td>
<td>3.40(1.25)</td>
</tr>
<tr>
<td>4. I am happy with the talks I have with my mother/father about my stuttering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 0 2 2</td>
<td>Father 1 1 3</td>
<td></td>
<td>3 2</td>
<td></td>
<td>3.70(1.15)</td>
</tr>
<tr>
<td>5. My mother/father and I talk about the thoughts I have related to my stuttering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 1 0 2</td>
<td>Father 1 2 4</td>
<td></td>
<td>6 3</td>
<td></td>
<td>3.60(1.07)</td>
</tr>
<tr>
<td>6. My mother/father knows my thoughts about my stuttering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 1 0 3</td>
<td>Father 1 1 2</td>
<td></td>
<td>3 5</td>
<td></td>
<td>3.70(1.25)</td>
</tr>
<tr>
<td>7. My mother/father and I talk about how I feel about my stuttering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 0 1 3</td>
<td>Father 1 2 4</td>
<td></td>
<td>5 2</td>
<td></td>
<td>3.60(0.84)</td>
</tr>
</tbody>
</table>
Table 5

Frequency counts and descriptive statistics for CASI items continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Mother</th>
<th>Father</th>
<th>Mother</th>
<th>Father</th>
<th>Mother</th>
<th>Father</th>
<th>Mean(s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. My mother/father knows how I feel about my stuttering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>4.20(0.78)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.50(1.17)</td>
</tr>
<tr>
<td>9. My mother/father is a part of my speech therapy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>3.20(1.31)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.70(0.82)</td>
</tr>
<tr>
<td>10. I want my mother/father a part of my speech therapy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3.10(1.66)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.90(1.52)</td>
</tr>
<tr>
<td>11. My mother/father and I talk about what I do in my speech therapy.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3.80(0.78)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.00(1.41)</td>
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<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4.40(0.96)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.40(1.71)</td>
</tr>
<tr>
<td>13. It was my mother’s/father’s decision for me to attend speech therapy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>3.70(1.70)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.60(1.57)</td>
</tr>
</tbody>
</table>
Item 4 for mothers indicated that two participants moderately disagreed, two who neither agreed nor disagreed, and six that moderately or strongly agreed. Taken together, these scores produced a mean score of 3.70 (1.15). Item 4 related to fathers showed two participants that strongly or moderately disagreed, three that neither agreed nor disagreed, and five that moderately or strongly agreed. These responses yielded a mean score of 3.40 (1.26).

For responses related to mother on item 5, there was one participant who strongly disagreed, two who neither agreed nor disagreed, and seven that moderately or strongly agreed, which suggested a mean score of 3.60 (1.07). Conversely, responses for fathers on item 5 indicated that three participants who strongly or moderately disagreed, four who neither agreed nor disagreed, and three moderately agreed. These responses yielded a mean of 2.90 (0.99).

Item 6 for mothers showed one participant that strongly disagreed, three participants who neither agreed nor disagreed, and six that moderately or strongly agreed. These responses yielded a mean of 3.70 (1.25) for mother responses. For fathers on item 6, there were two participants that strongly or moderately disagreed, two that neither agreed nor disagreed, and six that moderately or strongly agreed. Responses for fathers on item 6 indicated a mean of 3.40 (1.17).

Mother responses for item 7 showed one participant who moderately disagreed, three neither agreed nor disagreed, and six moderately or strongly agreed. These responses suggested a mean score of 3.60 (0.84) for mother responses. In regard to fathers on item 7, there were three participants who strongly or moderately disagreed, four that neither agreed nor disagreed, and three that moderately or strongly agreed for a mean of 3.00 (1.15).

On item 8 for mothers, two participants neither agreed nor disagreed and eight moderately or strongly agreed which indicated a mean score of 4.20 (0.78). For fathers on item 8,
two strongly or moderately disagreed, one neither agreed nor disagreed, and seven moderately or strongly agreed. These responses provided a mean score of 3.50 (1.17).

Responses in regard to mothers on item 9 indicated that three participants strongly or moderately disagreed, three neither agreed nor disagreed, and four moderately or strongly agreed, which showed a mean of 3.20 (1.31). In contrast, responses for fathers on item 9 demonstrated eight participants who strongly or moderately disagreed and two participants that neither agreed nor disagreed. These responses suggested a mean score of 1.70 (0.82).

In respect to item 10 for mothers, there were three participants that strongly disagreed, three who neither agreed nor disagreed, and four who moderately or strongly agreed. The mean score for these responses was 3.10 (1.66). Answers on item 10 regarding father yielded four participants who strongly or moderately disagreed, one that neither agreed nor disagreed, and five who moderately or strongly agreed. Father responses on item 10 produced a mean of 2.90 (1.52).

Participant responses for mothers on item 11 showed that four neither agreed nor disagreed and six moderately or strongly disagreed for a mean of 3.80 (0.78). Participant response for item 11 regarding fathers was that four strongly or moderately disagreed, one neither agreed nor disagreed, and five moderately or strongly agreed for a mean score of 3.00 (1.41).

For item 12 for mothers, one moderately disagreed and nine moderately or strongly agreed, which suggested a mean of 4.40 (0.96). Responses for fathers on item 12 showed four participants strongly or moderately disagreed and six moderately or strongly agreed for a mean score of 3.40 (1.71). Item 13 for mothers indicated that four participants strongly or moderately disagreed and six strongly agreed, which produced a mean score of 3.70 (1.70). Responses for
fathers on item 13 showed five participants that strongly or moderately disagreed, one participant that neither agreed nor disagreed, and four participants that moderately or strongly agreed. These responses produced a mean score of 2.60 (1.57).

**Overall Scores on CASI**

In addition to total scores on the PACS, Table 4 also displays total scores for individual participants on the CASI. A total score of 65 is the highest score on the CASI. Higher scores suggest greater agreement for each item. For perceptions towards mothers, all participant scores were 39 or above, indicated that the majority of participants received 60% of the total points on the CASI or above. In relation to fathers, seven participants received a score of 60% or above, and three scored below this rank, with scores of 33, 27, and 18.

**Spearman Correlations**

Table 6 provides group descriptive statistics for total scores on the PACS and CASI. Spearmen Correlations were performed in order to determine if a relationship existed between scores on the PACS and CASI. Correlations were examined for the open, problematic, and total scores on the PACS as well as the total score on the CASI. Non-significant correlations were observed for PACS total scores for mother and father ($r^2 = .384, p > .05$), PACS open communication subscale for mothers and fathers ($r^2 = .594, p > .05$), PACS problematic communication subscale for mother and fathers ($r^2 = .505, p > .05$), PACS problematic subscale for mothers and CASI total score for mothers ($r^2 = .337, p > .05$), CASI total score for father and problematic communication subscale for father ($r^2 = -.098, p > .05$), and CASI total score for father and PACS total score for father ($r^2 = .335, p > .05$). Results for the correlations are summarized in Table 7.
In contrast, three significant positive correlations were observed. The first significant findings yielded a significant positive correlation for CASI total scores for mothers and fathers \((r^2 = .764, p < .05)\), suggesting that higher scores for mother CASI totals were related to CASI total scores for fathers. Another significant positive correlation was found between the PACS open communication score for mothers and the CASI total score for mothers \((r^2 = .835, p < .05)\), which suggests that the higher scores on the open communication scale for mothers were related to higher scores on the CASI for mothers. Similar findings were observed in a positive significant correlation between PACS open communication totals for fathers and CASI total scores for fathers \((r^2 = .933, p < .05)\), suggesting that the more participants reported open communication between fathers, the more likely they were to report discussing topics related to stuttering with their fathers. The final positive significant correlation observed was for PACS total scores for mothers and CASI total score for mothers \((r^2 = .709, p < .05)\). This finding suggests higher total scores on the PACS for mother were related to higher total scores on the CASI. Additionally, this finding might suggest that the CASI items are more related to positive communication, than problematic communication.
Table 6

*Descriptive statistics for total scores on PACS and CASI*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PACS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Mother</td>
<td>39.90</td>
<td>6.34</td>
</tr>
<tr>
<td>Open Father</td>
<td>36.20</td>
<td>7.11</td>
</tr>
<tr>
<td>Problematic Mother</td>
<td>32.50</td>
<td>7.01</td>
</tr>
<tr>
<td>Problematic Father</td>
<td>31.70</td>
<td>7.21</td>
</tr>
<tr>
<td>Total Score Mother</td>
<td>72.40</td>
<td>10.45</td>
</tr>
<tr>
<td>Total Score Father</td>
<td>67.90</td>
<td>12.60</td>
</tr>
<tr>
<td><strong>CASI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score Mother</td>
<td>48.40</td>
<td>7.07</td>
</tr>
<tr>
<td>Total Score Father</td>
<td>39.40</td>
<td>13.15</td>
</tr>
</tbody>
</table>
Table 7

*Spearmen Correlations between Group Total Scores on PACS and CASI*

<table>
<thead>
<tr>
<th></th>
<th>1. PACS Open Mother</th>
<th>2. PACS Problematic Mother</th>
<th>3. PACS Total Mother</th>
<th>4. CASI Total Mother</th>
<th>5. PACS Open Father</th>
<th>6. PACS Problematic Father</th>
<th>7. PACS Total Father</th>
<th>8. CASI Total Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>--</td>
<td>.835*</td>
<td>.594</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>--</td>
<td>.337</td>
<td>.505</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>--</td>
<td>.709*</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4</td>
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<td></td>
<td></td>
<td></td>
<td>.764*</td>
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<tr>
<td>6</td>
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<td></td>
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</tr>
<tr>
<td>7</td>
<td>.384</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.933*</td>
<td>-.098</td>
<td>.335</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Note.* *p* < .05
**Wilcoxon Sign Test**

To determine if differences existed between total scores for mothers and fathers, a Wilcoxon Sign Test was conducted for scores on the PACS and CASI. Table 9 provides descriptive statistics that supplement the results of this test. One significant finding was noted for total scores on the CASI, with participants as a group reporting higher CASI scores for their mother than fathers ($z = -2.244, p < .05$), suggesting more communication about aspects of their stuttering with their mother when compared to their father. Non significant results were found for comparison between open communication scores between mothers and fathers ($z = -1.838, p > .05$), problematic communication scores between mothers and fathers ($z = -.178, p > .05$), and total scores on the PACS for mothers and fathers ($z = -1.187, p > .05$).

**Qualitative Data**

Following the coding procedure for the interview transcripts, ten minor themes emerged that contributed to the formation of four major themes (See Table 3). Major theme 1 consisted of discussions with parents, with two minor themes, preference to talk with mothers (minor theme 1) and speech techniques and general information (minor theme 2), contributing to its formation. Major theme 2 included comments regarding decisions about beginning speech therapy. This major theme consisted of two minor themes that were parent’s idea to begin speech therapy (minor theme 3) and the participant’s idea to begin speech therapy (minor theme 4). The third major theme explains the types of parental assistance provided to participants. Three minor themes contributed to this major theme and consisted of parent’s reminding participants to use speech techniques and giving advice (minor theme 5), parents and participants practicing speech techniques together (minor theme 6), and parents being described as good listeners and not interrupting participants (minor theme 7). The fourth and final major theme describes discussions
with other individuals about stuttering and speech therapy. Three minor themes added to this major theme and described stuttering and speech therapy as not being directly discussed with friends (minor theme 8) or siblings (minor theme 9), and depicted the type of conversations participants would have with other family members who stuttered (minor theme 10). Further explanations of the major and minor themes are explained below. Please refer to Table 8 for the thematic structure of the qualitative data. The following section will report the findings relate to the thematic structure.

**Major Theme 1 – Discussions with Parents**

The first major theme describes the conversations participants had with parents. As a group, participants discussed stuttering and speech therapy with parents to a certain extent, however much of the content of these discussions centered on speech techniques and general information about stuttering and speech therapy sessions. Also, some participants reported talking with their mothers more than fathers regarding stuttering and their speech therapy. The two minor themes that contributed to the development of this major theme are discussed below.

**Minor Theme 1 – Discuss Stuttering and Speech Therapy More with Mothers**

For four of the participants, the majority of conversations about stuttering and speech therapy were with their mothers. While these participants reported discussing stuttering and speech therapy with their fathers, it was to a lesser extent when compared to conversations with mothers. These participants also talked about how their mothers were usually the ones to assist in transporting them to speech therapy. For other participants, they indicated that stuttering simply was not discussed with their fathers, that it was their mothers that took more of an active role in speech therapy and discussions about stuttering. Bill is an example of a participant who experienced differences in how he discussed his stuttering with his father versus his mother when
he said, “I sometimes talk to him about stuttering but…it’s usually my Mom…because she takes me to therapy and stuff.” Molly shared a similar experience as she said, “Not really like it’s just like me and Mom, like she goes to speech with me, but like we don’t talk, like me and my Dad we don’t talk about it.”

Table 8

Major and Minor Theme Structure

- Major Theme 1 – Discussions with Parents
  - Minor Theme 1 – Preference to talk with mother
  - Minor Theme 2 – Speech techniques and general information
- Major Theme 2 – Decisions about Speech Therapy
  - Minor Theme 3 – Parents’ idea to begin speech therapy
  - Minor Theme 4 – Participant’s idea to begin speech therapy
- Major Theme 3 – Types of Parental Assistance
  - Minor Theme 5 – Reminding to use techniques and providing advice
  - Minor Theme 6 – Practicing speech techniques together
  - Minor Theme 7 – Good listening skills and not interrupting
- Major Theme 4 – Discussions with Others
  - Minor Theme 8 – Not directly talked about with friends
  - Minor Theme 9 – Rarely discussed with siblings
  - Minor Theme 10 – Sharing experiences with other family members who stutter
Minor Theme 2 – Speech Techniques and General Information are Discussed

In the case for nine of the participants, the majority of conversations with parents about stuttering and speech therapy revolved around fluency techniques and general information about stuttering. These conversations sometimes were initiated by parents after speech therapy sessions. Participants would describe the type of speech skills they were working on and what activities they may have done in speech therapy. In addition, participants would discuss with parents basic information about stuttering such as the severity of their stuttering on a given day and how their speech was during the day. Brad describes his experiences talking with his mother about his stuttering and speech therapy by saying, “Sometimes I use those techniques that I learned from [speech therapy] and I try to teach her that, to get her more knowledge about stuttering, about it, what I learned about it.” Amy explained how her parents would initiate conversations about stuttering at home when she said:

They ask me questions about it and then I, like they’ll ask me if I’ve been doing a lot lately or just a little bit… and then they’ll tell me what, am I having like a repetition or am I having just like pauses or whatever.

Although the majority of conversations between participants and parents consisted of topics related to speech skills and general information about stuttering, there was a subgroup of participants that shared feelings and thoughts about their stuttering with their parents. These conversations appeared to occur after a difficult day with their speech. Arthur describes the context in which such a conversation would occur where he stated, “I mean we talk sometimes about like, I don’t know like maybe my like feelings… if I’m like stuttering really bad … one day I might like go home and like say it was hard… talking to someone or whatever.”
Major Theme 2 – Decisions about Speech Therapy

In regard to experiences related to beginning speech therapy, participants appeared to fall within two distinct groups. For some participants, it was their parents’ idea, or initial decision for them to begin speech therapy. In regard to this group, some participants began speech therapy in elementary school and continued in middle school. In contrast, a second group of participants reported that it was their decision to attend speech therapy. For the most part, this decision was followed by a period of not attending speech therapy.

Minor Theme 3 – Parents’ Idea to Begin Speech Therapy

There were six participants that reported beginning speech therapy in elementary school and continuing every subsequent year. These participants reported that it was their parent’s decision for them to be initially enrolled in speech therapy. When describing initially attending speech therapy, participants’ statements were “to the point.” Leo provides an example of such a statement saying, “It wasn’t really my decision really, it was my Mom’s and my Dad’s.” Jim is another example of a participant who entered speech therapy in elementary school and continued until present day. He describes his decision to attend therapy as “Well in the third grade my Mom…she decided for me to go to speech therapy.”

Minor Theme 4 – Participants’ Idea to Begin Speech Therapy

Three participants reported it was their decision to attend speech therapy. These participants shared a similar history with speech therapy, with initially attending therapy during elementary school, discontinuing for a period of time, then decided to return to work on their stuttering. One participant appeared to be the exception to this experience, as he did not report attending speech therapy during elementary school and began therapy in middle school. When describing their decision to return, participants discussed a specific instance, or time period
where their stuttering was particular difficult. For example, Tyler recalled a specific day in
school when he had difficulty reading out-loud in class. He goes on to describe what happened
after that experience where he said:

...I realized that day that I wanted to try to do something to change that or help
that so that’s why I decided to come...That’s what prompted it and I told mom I
said hey I have to have some help, so that’s when Mom said that okay we’ll go [to
speech clinic].

Major Theme 3 – Types of Parental Assistance

Participants reported a variety of ways parents attempted to help them with their
stuttering. For the most part, participants perceived this assistance as helpful, yet a subgroup of
participants identified some of the assistance as unsupportive. Much of the assistance involved
the use of speech skills, being that parents would remind participants to use certain speech
strategies, provide advice, or sometimes practice speech skills with participants. Also,
participants reported parents providing assistance in the form of listening and not interrupting
them when talking.

Minor Theme 5 – Reminding to use Techniques and Providing Advice

There were seven participants who reported that parents would remind them to use their
fluency skills learned in speech therapy. Also, parents reportedly provided advice and
suggestions in how participants could work through stuttering moments. These took the form of
requesting that participants slow down when talking. Overall, participants felt the reminders
were helpful and supportive in allowing them to manage their stuttering. For instance, Jack
discussed how his mother would remind him to use his speech skills:

She reminds me…about my…stuff I’ve learned, it’s like if I stutter she’ll stop me
and say ‘remember what your teacher taught you’ and then I’ll be like, okay and
then I just stop and start all over again take a deep breath, use my controls... Jack,
P#3
Although the majority of participants perceived the reminders and advice helpful, there were some participants who had a different experience. For these participants, the reminders to be fluent were frustrating and perceived in an unsupportive manner. Drew describes his experience with his mother reminding him to use his speech skills when in conversations. He goes on to describe his mother’s response as:

“It’s not even in the quiet way, it’s in the loud way, as in ‘Drew talk better, Drew, slow down, and same thing…my Mom …just says ‘keep on doing it ‘Drew’ keep on doing it I know you can do it, keep on doing it.’ What the heck.

Minor Theme 6 – Practicing Speech Techniques Together

Parents also practiced fluency skills with three of the participants. These participants described their parents setting aside a time where they would sit down together and work on using speech skills in the home environment. For one participant, his parents would actually enter his speech therapy session and practice using speech skills with him. Some of the participants reported their fathers practiced their speech skills with them as well. They attributed this to their belief that their father enjoyed practicing in general with other novel activities. Arthur shares his experiences practicing speech skills with his parents while reading out-loud at home:

A few months ago my parents… every other night… we would just sit down and they would have me read a book like I’d read… really slow I’d have a bunch of pauses I’d just attempt to read a passage from a book without, well trying to prevent stuttering in a way...

Minor Theme 7 – Good Listening Skills and Not Interrupting

For five participants, parents were described as good listeners who did not interrupt. These responses were to questions in regard to how parents help participants with their speech and when participants were describing their parents. Participants perceived this type of assistance as helpful in allowing them to communicate their message, especially if they were
having a difficult day with their speech. Amy described her positive perceptions regarding her mother’s ability to listen to her when she has questions. Amy said, “She’s helpful with my speech and she listens like all the time like if I have any questions or anything to tell her.” Tyler shared a similar experience with both his parents, reporting that it was helpful for his parents to not interrupt him. In describing his experience, Tyler said “I like how they both …don’t interrupt me though if I’m having a bad day and stuff like that and you know… it helps a lot if they don’t interrupt and I’m trying to say something.”

Most participants reported that parents were good listeners and did not interrupt them when stuttering would occur, however one participant had a different experience. Leo described a situation that would occur between him and his parents when he would stutter where his parents would interrupt him and remind him to use his speech skills. Furthermore, Leo shared this type of assistance was unhelpful as he goes on by saying,

…and I kind of sometimes don’t like it…like if I’m telling them something or I’m telling my sister something… if I stutter, they interrupt me and tell me to use my tools and sometimes when that happens I lose my train of thought.

**Major Theme 4 – Discussions with Others**

Participants reported their experiences about discussing their stuttering and speech therapy with other individuals such as friends, siblings, and other family members. For the majority of participants, stuttering and speech therapy were rarely discussed with friends and siblings. Finally, some participants reported talking with other family members who also stuttered.

**Minor Theme 8 – Not Directly Talked about with Friends**

Eight participants reported that stuttering was not openly talked about with friends. Some participants did not feel the need to discuss their stuttering with friends because their friends
already knew they stuttered. In addition, friends just simply knew that the participant stuttered, or as Amy put it, “…they just figure it out that I stuttered.” If stuttering or speech therapy were discussed with friends, it was usually brief in nature and was assumed that friends already knew about the nature of the participant’s stuttering, or participants did not feel the need to directly address stuttering with friends. Some participants shared discussing speech therapy with friends during elementary school when going to speech therapy was perceived as different and “cool.” However, participants reported not having these discussions with friends at the time of this study. Molly described her experience with discussing stuttering with friends as not feeling the need to directly address her stuttering with them. She states, “…with my friends, like we just really don’t talk about it…they know that I have it [a stutter]… like I never said, hi…I have a stutter…we never like addressed it, they just… know that I have one.”

Despite the large majority of participants who did not directly talk about stuttering with friends, there was one participant who shared that he discussed his stuttering frequently with his friends. Arthur indicated that he knew his friends for a long time and described his group of friends as supportive. Arthur explained how he talks with his friends about his speech by saying

I talk about my stuttering with like all my…good friends... I’ve known all my good friends for like almost my whole life I mean…they’re really understanding and like accepting of who I am though and they have no problem that I stutter

Minor Theme 9 – Rarely Discussed with Siblings

Similar to conversations with friends, there were six participants that did not frequently discuss stuttering or speech therapy with their brothers or sisters. Many of the reports regarding siblings were comparable to friends, with participants indicating that siblings already knew about their stuttering. Some participants believed that siblings would not be interested in talking about stuttering with them. Jack reported this belief when describing his experience talking about his
stuttering with his brother and sister. He stated “My sister doesn’t really listen to most things. She just listens to the things she likes...I don’t really talk to my brother about speech therapy, he just mainly stays downstairs…”

One participant deviated from this theme by reporting that he discussed his speech therapy with his brothers. In these discussions, Jim shared that his brothers appeared to initiate the discussion by asking questions about speech therapy. These conversations appeared to be about what was done in speech therapy and clarified who the person was he was visiting. Jim explains his experience talking about his stuttering with his brothers as

I have talked a little bit with my brothers, but just a little bit…they would usually like ask me about who… [my speech therapist] is cause they really don’t know who he is and what he has taught me, so I usually tell them about that.

Minor Theme 10 – Sharing Experiences with Other Family Members who Stutter

There were four participants who reported having a family member that also stuttered. As a group, participants reported a variety of family members who stuttered that consisted of a sister, brother, mother, father (unconfirmed), cousin, aunt, and grandmother. Most of the participants reported talking with this family member regarding strategies they use to manage their stuttering, their shared experiences with stuttering. For example, Jim describes his experience talking with his Aunt who stutters and how this conversation was facilitated by a movie about stuttering called “The King’s Speech.” Jim goes on to say

I have with one for like a little bit … it first started…on the subject of the King's Speech, the movie...and…we talked about the techniques that he used…and that some of those are what I use in my speech.

Of the participants who reported having another family member who stuttered, there were two participants who indicated they did not discuss stuttering with this family member. One of these participants was Molly, who believed that her father demonstrated stuttering behaviors,
however she was uncertain if he actually stuttered. For Molly, she reported not discussing speech therapy or stuttering with her father, as she previously shared that her mother was more of the person she talked with about her speech. In addition, Drew thought that his sister stuttered, yet he believed she would not be receptive to discussing stuttering as he reported “If I did [talk about stuttering], she might leave or sleep because she doesn’t care.”
CHAPTER V.

DISCUSSION

This purpose of this study was to explore how AWS perceive their communication with their parents in regard to topics related to stuttering, such as speech therapy, parental assistance, and stuttering in general. Also, this study sought to better understand how AWS communicate with their parents in general and how this general communicate is related to discussions about stuttering. General differences between mothers and fathers were also explored. In addition to parents, this study was interested in investigating how AWS talk about stuttering with other people in their environment. Lastly, this study wanted to compare qualitative and quantitative responses to determine if any inconsistencies or consistencies were present in participant reports.

In order to answer these questions, qualitative and quantitative data were collected from 10 AWS between the ages of 12 and 17. The qualitative portion consisted of a semi-structured interview where participants shared their experiences relating to discussing aspects of their stuttering with parents, other family members, and friends. Along with interviews, participants completed several questionnaires that made up the quantitative portion of the study. These questionnaires provided descriptions of participants, information related to their level of agreement when discussing various topics related to stuttering with their mothers and fathers, and information about general communication with mothers and fathers. The results of the qualitative and quantitative data were analyzed separately and consistencies and discrepancies between these data were compared at the conclusion of the study.

The following sections discuss perceptions of participants as they relate to parents, other individuals in their environment, and differences between perceptions related to mothers and fathers. Other topic areas are discussed that include implications for stuttering therapy with
Communicating with Parents about Stuttering and Speech Therapy

One of the purposes of this study was to explore how AWS communicate with their parents about various topics related to stuttering and speech therapy. During participant interviews, the majority of individuals reported that conversations with parents about stuttering centered on information related to the severity of their stuttering on a given day and general knowledge about stuttering. During the completion of the CASI, the majority of participants agreed that stuttering was talked about and, for the most part, they felt comfortable talking with parents about these topics. Qualitatively, participants did not report discussing their attitudes, thoughts, and feelings about stuttering with their parents. Yet, responses on the CASI suggested that participants did talk about their thoughts and feelings about stuttering and believed, to a certain extent, that parents knew about their thoughts and feelings about stuttering. In short, participants responded quantitatively to talking about their feelings and thoughts about stuttering with their parents, however did not disclose this information in the qualitative interview. The discrepancy in these data sources may be explained by participants believing parents “already knew” about their thoughts and feelings about stuttering. Therefore, participants may have not felt the need to report this information during the interview. This belief is shown by one response provided by Brad, who eventually disclosed information regarding how he talked about his stuttering with his parents, however when initially asked about how he talked with his parents about stuttering he responded, “…my parents know that I stutter, so I don’t, I figure that I don’t need to speak to my parents…because they already know that I stutter.” He continued by saying:
“…when I talk to them, then when I stutter a little bit, they are good listeners, so they don’t, and they know the pain that I feel if I stutter, so they just listen good.” This later statement reflects the belief that Brad’s parents already knew about the emotional aspect of his stuttering.

Many studies exist that have explored parental speaking behaviors of parents of CWS (for a detailed review see Nippold & Rudzinski, 1995). The current findings differ from this past research, as these findings report on content of communication rather than speaking patterns. Qualitative and quantitative data reported in this study suggest that basic information about stuttering is discussed, along with some reports of discussing feelings and thoughts about stuttering. Among the topics most frequently discussed between adolescents and parents were therapy activities and fluency techniques. Through narrative reports, almost all participants reported discussing fluency techniques with their parents. This was consistent with item 11 on the CASI, which asked participants’ agreement on whether they talked with their parents about what they did in speech therapy, as the majority of participants agreed on the CASI about talking about speech therapy with their parents. To date, little research exists that describes the conversations about stuttering between individuals who stutter and their parents. Previous research has reported that for some people who stutter speech therapy was not a topic that was discussed openly (Hearne et al., 2008; Hughes et al., 2011). Furthermore, these findings appear to contradict other findings in studies exploring the experiences of people who stutter who have found that stuttering is not discussed openly with parents and other family members (Corcoran & Stewart, 1995; 1998; Hearne, et al., 2008; Hughes et al., 2011). For example, Hughes et al. indicated that adults who stutter who were reflecting on their experiences during childhood had a desire to talk about more emotional components with their stuttering. In the current study, participants did not express a need to talk with their parents about their feelings and thoughts
about stuttering. These inconsistencies bring up the question of whether or not these participants would indicate such as desire to discuss the psychosocial aspects of their stuttering if they were interviewed as adults. In other words, are these participants following the same trajectory as other findings from adults who stutter, being that as future adults will they perceive their conversations with their parents as lacking discussions about more emotional components of their stuttering? Or, are these findings following a different path related to experiences communicating about stuttering and participants, for the most part, were truly satisfied with their conversations with their parents? Future research should address this possible inconsistency.

In a sense, participants communicated with their parents about stuttering and speech therapy through the types of assistance parents provided. This finding ties with another purpose of the study, that being to identify types of assistance that adolescents received from their parents. Participants described various ways in which parents would help them manage their stuttering. One way that parents helped participants was through the use of reminding them to use speech techniques and providing them with advice. This particular finding is similar to earlier studies that have reported how parents provide suggestions or advice to their child who stutters in how to manage stuttering moments (Dickson, 1971; Glasner & Rosenthal, 1957; Johnson & Associates, 1959).

Not only did participants report that parents reminded them to use techniques, but also said that parents helped them with stuttering by being “good listeners” and practicing speech techniques with them. These findings are different from previous literature that examined the experiences of individuals who stutter in respect to providing more descriptive information in regard to other ways that parents help with stuttering. There are few studies that have found people who stutter to report their parents practicing speech techniques with them as a means to
help them with stuttering. However, other studies have reported on the listening abilities of parents of people who stutter. For example, Klompas and Ross (2004) found that some of their participants reported that parents were not “good listeners” and finished their sentences regularly.

For these participants, some types of parental assistance were perceived as more helpful than others. For instance, participants thought it was helpful when parents listened and did not interrupt them when talking. Furthermore, the participants who reported that their parents practiced their speech skills with them either did not comment on the effectiveness of this help, or indicated that it was helpful. Lastly, of the seven participants who reported that their parents reminded them to use techniques or offered advice, three reported this assistance was unhelpful. A closer examination of the thematic structure for these participants indicates that they believed their parents interrupted them or demonstrated a lack of understanding about their stuttering. When examining responses on the CASI, one question (item 3) asked participants to indicate their agreement in regard to their belief of the helpfulness of the talks they had with their parents about their stuttering. Responses to this item indicated that more participants either moderately or strongly agreed with this item when compared to the number that disagreed. This comparison between qualitative and quantitative responses for perceived benefit of communicating with parents and types of assistance described suggest more similarities than differences. The findings of Hughes et al. (2011) also suggest that individuals who stutter received unhelpful assistance from parents and other family members, with some participants reporting family members interrupting them when talking and displaying behaviors that would suggest a lack of understanding about stuttering.
Another purpose of the study was to explore the experiences of AWS related to their decision to attend speech therapy. Participants’ interview data and the responses for the one item on the CASI that asks about the decision to begin speech therapy (item 13), indicated there were mixed findings in regard to experiences and beliefs about initiating speech therapy. In respect to qualitative data, there were six participants whose reports suggested that it was their parents’ decision for them to attend therapy. The participants’ responses on the CASI for item 13 were similar, specifically about half of participants either moderately or strongly agreed that it was their parents’ choice for them to begin speech therapy.

In their qualitative study of the experiences of AWS related to speech therapy, Hearne, et al. (2008) also described the decision-making process for AWS to enter speech treatment. For the majority Hearne et al.’s participants, it was the participants’ decision to attend speech therapy. In the current study only a few participants suggested that they chose to initiate therapy; however the majority of the group provided statements that suggested it was originally their parents’ idea to enroll them in speech therapy. As previously stated, these participants originally began speech therapy in elementary school and continued into middle school. Therefore, since speech therapy had been a part of their childhood, it may have been difficult for this group of participants to determine who (parent or themselves) originally decided to enter speech therapy to address their stuttering.

With younger CWS it is evident that parents need to take the responsibility in regard to deciding when to enroll and begin speech treatment. For AWS, the decision to begin speech therapy can become less clear. In their article about working with teenagers who stutter, Zebrowski and Wolf (2011) described the different clinical profiles that can occur when parents recommend that their teenager attend speech therapy when compared to adolescents who make
an independent choice to enter speech therapy. When parents recommended speech therapy to their adolescent, Zebrowski and Wolf state the adolescent may enter therapy with an incomplete goal in mind and have an unclear concept of what speech therapy can offer.

Comparing Communication Levels between Mothers and Fathers

Another purpose of this study was to compare perceptions in regard to communication with their mothers versus their fathers. In order to discuss findings related to this research question, communication differences between mothers and fathers are discussed in relation to both stuttering and general communication. Lastly, mother-father comparisons are discussed in terms of comparing PACS and CASI responses.

Communication about Stuttering

Participants both qualitatively and through responses on the CASI indicated that they were more likely to discuss topics related to stuttering and speech therapy more with their mothers when compared to fathers. During the interviews, four participants shared a preference to communicate more with their mothers about stuttering. These qualitative data were supported by the total scores on the CASI, as eight out of ten participants’ yielded scores that were descriptively higher for mothers than fathers. Furthermore, results of the Wilcoxon Sign Test suggested a significant difference between CASI total scores for mothers and fathers.

To date, there is little empirical data comparing differences between how individuals who stutter communicate about stuttering with their mothers compared to fathers. Kelly (1994) points out this fact in her article examining the speaking behaviors of fathers of CWS. In her concluding remarks, Kelly stated that fathers do not appear to be different than mothers in regard to modeling speaking behaviors. However, unlike the purpose of the current study, Kelly’s study was concerned with exploring speaking behaviors of fathers of CWS, and did not address the
content of these messages between CWS and their fathers. Kelly (1994) also draws attention to previous literature that found differences between mothers and fathers in regard to conversational styles. Among the articles highlighted by Kelly is an article by Perlmann and Gleason (1993), who suggested that fathers present different interaction styles when compared to mothers in general. Also, Perlmann and Gleason suggested that fathers may be more linguistically demanding in their interactions with their children when compared to mothers.

For AWS in this study, there were qualitative and quantitative reports that highlighted different communication patterns between mothers and fathers when discussing stuttering. It is unclear whether general communication differences between mothers and fathers contributed to the reason for this disparity. Almeida and Galambos (1991) found that fathers who were more involved in their adolescents’ lives were more accepting of their adolescents. Furthermore, Almeida and Galambos indicated that more involved fathers more closely resembled mother-adolescents relationships compared to fathers who were less involved. Almeida and Galambos’ findings may provide some explanation regarding the differences between how participants talked about stuttering with their mothers versus fathers, as mothers appeared to be more involved in the speech therapy process when compared to fathers. It can argued that, perhaps, one reason participants communicated more with mothers than fathers about stuttering could be due to how mothers and fathers were involved in speech therapy.

**General Communication**

As a group, there were no significant differences between levels of general communication between mothers and fathers on the PACS. Furthermore, the majority of participants fell within the normative range of scores on the PACS, suggesting that as a group these AWS were no different than other adolescents their age in regard to how they communicate.
with their parents. In regard to communication abilities, Blood, Blood, Tellis, and Gabel (2001) found that AWS are different from adolescents who do not stutter in respect to communication apprehension during interpersonal conversations and when talking in groups. It was noted that Blood et al.’s findings were in regard to reporting communication apprehension based upon the setting, and not with particular communication partners. This study differs from Blood et al.’s findings in that it provides information on communication with parents and not the specific situation in which communication was taking place.

Open Communication and Discussing Stuttering

In addition to comparing communication levels between mothers and fathers, another purpose of this study was to determine if there was a relationship between general communication levels and discussions about stuttering. Although there was not a significant relationship between total scores on the PACS between mothers and fathers, a significant relationship existed between total scores on the open communication subscale of the PACS and CASI total scores for both mothers and fathers. Recall that the PACS defines open communication as more positive in nature, consisting of perceived levels of understanding and satisfaction in these talks. In other words, this relationship can be stated that the higher participants rated levels of positive communication with their parents, the more likely they were to communicate with parents about stuttering and feel as though parents understood their experiences.

Organizations that are interested in stuttering recommend and encourage parents to demonstrate positive communication behaviors to facilitate fluent speech production, as well as help their child manage their stuttering. The Stuttering Foundation of America, for example, has published a brochure that encourages parents of CWS to communicate to their child, among
other things, that they accept them, are listening to the content of their message, and to reflect on their communication style with their child (Stuttering Foundation of American, 2008). In their publication of a brochure for parents of teens who stutter, the National Stuttering Association encourages parents to display open communication behaviors with their teenagers who stutter to establish a trusting foundation to discuss topics related to stuttering (National Stuttering Association, 2006). The results of this study are also consistent with the writings of Logan and Yaruss (1998), who describe ways in which parents of CWS can openly discuss stuttering with their child. Many of the strategies Logan and Yaruss write about consist of communicating to the child who stutters that the parent is listening and understanding the child’s point of view. Also, Logan and Yaruss suggest that parents disclose personal general fears in an attempt to communicate to their child that it is acceptable to discuss fears they may have related to stuttering.

Experiences Communicating with Others

One group that was a main focus in this study was parents of AWS. This study also sought to explore how AWS discuss stuttering with other individuals in their environment. In order to understand these experiences, participants were asked during their respective interviews how they communicated with friends, siblings, and other family member who may stutter about stuttering and speech therapy. The findings related to these groups are discussed below.

Communication with Friends

As a group, participants did not openly discuss stuttering and speech therapy with friends or peers, however they indicated that friends knew that they stuttered and, to a certain extent, knew about them going to speech therapy. These findings contribute to a trend that has been noted in previous studies of AWS. For example, Blood et al. (2003) also found that many AWS
reported that friends knew about their stuttering and the most common way in which AWS
reported that people find out about stuttering suggested an indirect method of disclosure, being
that stuttering occurs and others notice it. This indirect way of others finding out about stuttering
is consistent with the qualitative reports from participants, as they indicated that stuttering is not
directly addressed with friends because friends “just know” that participants stutter. Hearne et al.
(2008) found comparable results in regard to how AWS do not discuss stuttering or speech
therapy openly with friends. In their study, Hearne et al. found that AWS did not discuss
stuttering or their feelings about stuttering with friends. In the current study, participants as a
group reported at one point discussing speech therapy when they were younger with friends;
however these discussions appeared to decrease when they got older.

Communication with Siblings

Similar to discussions with friends, stuttering was seldom talked about with siblings. If
stuttering was discussed with siblings, it was very brief and consisted of basic information about
speech therapy and stuttering. Very little research has reported how AWS, let alone people who
stutter, communicate about stuttering with their siblings. Previous research exists that describes
the experiences of siblings of a person with a disability. Seligman and Darling (2008) write that
siblings of a person with a disability may demonstrate uncertainty about how to discuss the
disability with their sibling because of a lack of understanding about their sibling’s condition.
This may have been the case for the siblings of participants in this study. The lack of
communication about stuttering and speech therapy with siblings may have contributed to a lack
of awareness from the point of view of the sibling in how to discuss stuttering.
Communication with Family Members who Stutter

Four participants reported that other family members stuttered. Both of the female participants, Amy and Molly, indicated their parents at one point stuttered, although in Molly’s case she was uncertain if her parent actually stuttered. For Amy, she reported in her interview that she asked her mother about her experiences with stuttering. When examining her responses on the CASI, she descriptively reported higher levels of communication about stuttering with her mother when compared to her father. In regard to Molly’s communication with her father, whom she believed stuttered, she said she did not communicate about stuttering with her father, and her total scores on the CASI confirmed this experience. Other participants reported family members who stuttered.

Little is known about how family members who stutter talk about their stuttering. Despite the lack of studies in this area, it is well documented that stuttering runs in families (Bennett, 2006; Guitar, 2006) and a family history with stuttering has been reported in about half of all individuals who stutter (Yairi & Ambrose, 2005). This was true for this group, as 4 out of the 10 participants reported having a family member who stuttered, or had a family member who had stuttered at some point in their life. All participants reported talking with these family members about stuttering and described these conversations as not being about general experiences and the use of fluency techniques and not about emotional or social aspects related to stuttering.

Younger and Older Adolescents

Although the comparison between younger and older adolescent perceptions was not a research question for this study, the differences between these groups is an important discussion point, as many developmental changes occur during adolescence. For the purposes of categorizing younger and older adolescents in this study, participants who were between the ages...
of 12 and 14 were categorized as younger adolescents, and those above the age of 15 were defined as older adolescents.

Identity development is frequently discussed in the adolescent development literature and it is possible that participants may have been at various stages of developing their identity. Erikson (1960; 1963) discussed that exploration of an identity contributes to an individual’s formation of their identity. As previously mentioned, Daniels and Gabel (2004) have also discussed how that for individuals who stutter identity development may be difficult. For the older adolescents in the sample, it may be said that they had more experience in exploring how stuttering fit into their identity when compared to younger adolescents. Three out of the four older adolescents in the sample indicated that they have mentioned their stuttering to others. However, these self-disclosures occurred only after others brought up the topic of stuttering, or reacted to their stuttering in an unfavorable manner. These findings are consistent with other studies that compared responses from younger and older AWS. For example, Blood et al. (2003) reported that older AWS were more likely to disclose the fact they stutter to other individuals than younger AWS. In another study, Blood et al. (1998) found that younger adolescents were more likely to engage in avoidant behaviors in coping with their stuttering. These findings by Blood et al. (1998) are consistent with the reports from younger adolescents in this sample. As a group, the younger adolescents did not report directly talking with other individuals about their stuttering directly; rather they would deal with their stuttering when it would occur.

Since participants were reporting their perceptions of how they communicate with others, the development of social cognition during adolescence is particularly relevant when discussing these findings. The perceptions adolescents have of others as well as themselves changes over time during this developmental time period. For instance, two participants, Bill and Tyler,
perceived themselves differently when they were in the social context of their friends. For Bill, he felt differently around his friends and did not stutter around them. When asked if he talked with his friends about stuttering, Bill said “Not really, it’s like the same thing I don’t stutter around them or anything so… talking to friends and stuff isn’t that hard. It’s not hard. I just talk normally.” Bill may have had a different self perception around his friends, one where stuttering was not occurring. Tyler had a similar experience with discussing stuttering with his friends. He described his experience as the following:

I’d say if I’m around my friends I’m usually on my, I don’t know how to describe it, my mode, but it’s like, I like don’t really have any problems when I talk to em’, so it’s almost like I can talk fluently, easily with them like I’m relaxed with them…

Previous literature has also described how adolescents view themselves differently depending upon the social context, such as being around friends or family (Harter, Bresnick, Bouchey, & Whitesell, 1997).

Outliers: Jim and Molly

When compared to the group as a whole, there were two participants who reported extreme scores on the PACS as well as the CASI. Jim reported higher amounts of general communication and communication about stuttering with his parents while Molly’s scores suggested lower levels of communication with her parents. A closer examination of their qualitative and quantitative responses provided additional reasoning for their responses.

Jim’s total scores for both mother and father on the CASI also matched another participant’s total score for this participant (Jack: 106). However, when Jim’s qualitative thematic structure is explored, it reveals that he communicated more about his stuttering with his siblings when compared to Jack. In addition, Jim’s qualitative data supports his quantitative responses as he indicated in his interview discussing his speech skills he learned in speech
therapy with another family member who stuttered, as well as talking about his stuttering and speech therapy with his family. In comparison, Molly’s scores indicated that she felt stuttering and speech therapy were not discussed with her parents and her family. When examining her qualitative interview, it revealed that Molly would not discuss her stuttering openly with her siblings as well as stuttering being a topic that she would not discuss with her father. It appears that Molly’s qualitative data supports the responses she provided on the PACS and CASI.

Implications for Stuttering Therapy with Adolescents

These findings present implications when working clinically with AWS. One suggestion would be to encourage open communication between parents and adolescents. These findings indicated that the more adolescents reporting positive aspects of communication with parents, the more likely they were to report discussing stuttering with parents. It appears that laying the foundation of good communication skills is relevant to discussing stuttering in a healthy, productive manner.

Another implication from these findings is that for clinicians to become aware that AWS discuss stuttering and speech therapy differently with their mothers and fathers. Based on these 10 participants, qualitative and quantitative responses suggest that mothers were more involved in the speech therapy process for participants. In addition, participants reported discussing stuttering more with mothers versus fathers. For some AWS, it may be appropriate to involve fathers more in the speech therapy process.

This study also describes a variety of assistance that parents provide to AWS, most of which is perceived as helpful. Much of the communication about stuttering appears to stem from speech therapy, with the majority of the conversations between parents and participants consisting of speech therapy activities, fluency skills, and general information about stuttering.
It is important that clinicians understand that these conversations appear to occur for AWS. By becoming more aware of how topics about stuttering are being discussed in the home environment, clinicians can assist in facilitating these discussions and providing recommendations to families to assure these conversations are productive in nature.

Finally, this study allows clinicians to become aware of how AWS may communicate in their broader social context, as these participants did not discuss their stuttering openly with friends or siblings. If clinicians were considering including other individuals in speech treatment with AWS, this information would be important because it provides an in-depth description of the broader social context of AWS. By understanding this context, clinicians can more accurately include others, if appropriate, such as friends and family members into the therapy process for AWS.

Development of the CASI

These findings are promising for the support of the CASI as a research and clinical tool for AWS. The qualitative data collected in the current study assisted in confirming and validating many of the response on the CASI. With the exception of questions related to thoughts and feelings, there were no major inconsistencies between qualitative and quantitative responses made by participants. These results provide support for using the CASI on larger populations of AWS to determine their communication levels with parents about a variety of topics related to stuttering. Furthermore, the CASI has demonstrated a significant positive correlation between open communication levels and conversations about stuttering with both parents. These results also allow for the refinement of the CASI. In reviewing CASI items in light of the current findings, items requesting level of agreement regarding parental knowledge about participants’ speech therapy, thoughts, and feelings about stuttering may have assumed that participants were
discussing these areas with parents. It could be argued that participants did not feel the need to communicate about stuttering, thus they were predisposed to assume their parents knew about their stuttering, which could have led participants to report positive responses to these items. In the future, the items on the CASI should be altered to directly reflect communication. Also, items on the CASI were correlated with open communication. Upon further review, none of the items on the CASI appear to directly reflect problematic communication. Future versions of the scale will include similar items as those on the PACS that reflect areas of problematic communication experiences.

Limitations

These findings provide descriptive information regarding how adolescents perceive communication between their parents and other individuals. While these findings are descriptive, they need to be interpreted with caution due to several limitations. These limitations are described below.

One limitation of this study is that the majority of the sample was comprised of younger AWS. When examining the descriptive information on participants, the reader becomes aware that four out of the ten participants were 12 years of age. This concentration of younger AWS in the sample may have biased the results to a younger adolescent perspective regarding communication with parents, family members, and friends about stuttering.

Another potential limitation lies in the methods for the study. This study comprised a mixed methods approach to analyzing adolescent communication about stuttering, however the emphasis of the study was qualitative in nature. While the quantitative responses assisted in confirming much of the qualitative data obtained, this study is unable to be generalized to a larger population of AWS due to its low sample size of ten participants, as with any study
incorporating qualitative methods. In addition, this study is limited in the ability to completely validate the CASI for clinical use. While the scale has demonstrated valid characteristics, it is recommended that it be tested on a larger sample of AWS to fully determine the CASI’s psychometric properties.

In addition, the wording of the semi-structured interview questions may have limited participant responses. As previously stated, participants reported on the CASI that parents knew some of their attitudes, thoughts, and feelings related to stuttering. However, these reports did not emerge in the qualitative interview. One possible explanation for this inconsistency is that participants were not asked direct questions about whether or not they discussed their feelings and thoughts with their parents. The rationale for not including these types of questions was that the primary researcher wanted to remain true to the spirit of qualitative research and allow for themes to emerge from the qualitative data. However, taking into consideration the cognitive changes that occur in adolescence, one may better understand the rationale for these qualitative and quantitative differences. From a cognitive development perspective, the period of adolescence can be viewed as a transition from concrete operational thinking to formal operational thinking (Piaget, 1972). As Piaget points out, the formal operational thought involves the use of hypothetical reasoning, which can influence the conversations of adolescence. Piaget goes on to state that hypothetical reasoning allows for individuals to take the perspective of another person. Some of the participants, especially the younger adolescents, may have been thinking about the interview questions in a concrete manner and therefore answering questions literally.
Conclusions

This study sought to better understand the experiences of AWS related to communication with parents as well as with friends, siblings, and other family members. As a group, these ten participants indicated that stuttering was talked about with parents in the home environment. Most of these conversations were of a speech therapy nature, with AWS and their parents discussing fluency skills and speech therapy activities. Qualitative and quantitative responses confirmed that these participants discussed topics related to stuttering more frequently with mothers when compared to fathers. Furthermore, mothers of participants were more involved in the speech therapy process for these participants. In regard to other individuals, participants indicated that stuttering was rarely discussed with friends and siblings; however general information about stuttering experiences was talked about with other family members who stutter. Other development aspects of adolescence such as social cognition and identity development assist in discussing these findings and explaining differences between how older and younger adolescents responded to certain questions. One important implication from these data is that positive communication levels between mother and fathers was related to how much participants reported talking about stuttering with mother and fathers. Taken together, these findings assist clinicians who work with AWS in better understanding how AWS communicate about stuttering with their family and friends.
REFERENCES


Dear (Person’s name/Organization’s Name),

My name is Charles Hughes and I am a doctoral student in the Department of Communication Sciences and Disorders program at Bowling Green State University (BGSU). I’m contacting you because I was wondering if you could assist me with identifying potential participants for my dissertation study.

My dissertation study explores the perceptions of adolescents who stutter regarding communication with their parents. This communication involves levels of open and problematic communication, as well as communication about specific topics related to stuttering. The findings from this study will help contribute to our understanding of how adolescents who stutter and their parents communicate with each other and the extent to which they talk about certain aspects of stuttering. Furthermore, these findings will assist in our treatment of adolescents who stutter as it relates to parental involvement and discussing stuttering with adolescents.

This study has been approved by the BGSU Human Subjects Review Board and the study’s reference information is as follows: H11D163GE7

I would greatly appreciate your help in recruiting participants. This email contains important information below concerning parental consent of potential participants. If you are willing to help, could you please forward this email to parents of adolescents who (1) have a child between the ages of 12 and 17 who stutter that (2) has had experience in speech therapy for their stuttering. In addition, please include a brief statement in your email to parents, drawing their attention to the parental consent information at the bottom of this email and letting them know if they would like to allow their child to participate, they are to contact me, by email, with an email address of their child so that I can provide their child the survey link directly.

You may forward the consent information to parents by email if are confident that the email address is that of the parents and not a shared family e-mail address. If you are uncertain as to whether the email is a family shared address, please contact parents of potential participants using a more secure method, such as over the phone, or in person.

Thank you for your help. If you have any questions about participant recruitment, or this study, please feel free to contact myself (Charles Hughes, 440-773-5200, chughes@bgsu.edu) or my advisor (Dr. Rodney Gabel, (419-372-7168, rgabel@bgsu.edu). You can also contact the Chair of the Human Subjects Review Board (419-372-7716, hsrb@bgsu.edu)
(Appendix B)

Parental Informed Consent

My name is Charles Hughes and I am a doctoral student in the Department of Communication Sciences and Disorders at Bowling Green State University. With the assistance of my advisor, Dr. Rodney Gabel, I am conducting a research study that examines the perceptions of adolescents who stutter regarding general communication with their parents, as well as communication about their stuttering. You are being provided this information due to your child’s involvement in an organization related to stuttering, their contact with a speech-language pathologist, and because they are between 12 and 17 years of age.

If you are willing to have your child participate, they will be asked to complete survey items and participate in a short interview with me (Charles Hughes). In addition, once your child’s interview has been analyzed, they will be asked to follow-up with me regarding their responses to their interview to make sure I understood their responses.

We anticipate it may take anywhere from 45 to 60 minutes to complete the entire study. The survey items contain three questionnaires that consist of demographics items, a parent-adolescent communication scale (mother and father version), and a scale that asks adolescents their perceptions about how they discuss various topics about their stuttering with their parents (mother and father version). The semi-structured interview contains seven questions with planned prompts for each question.

Your child’s participation is completely voluntary. Your child is free to withdraw at any time. Your child may decide to not answer questions or discontinue participation at any time without penalty. Your decision whether or not to participate will not affect your relationship with Bowling Green State University, organizations for individuals who stutter, or any professionals in speech-language pathology.

Upon completion of the interviews and survey items, I will place your child’s data in a locked briefcase in which I will personally transport their data to a locked, secured lab space. From there, your child’s responses will be stored on a password protected computer that is located in a secured, locked room. Only individuals affiliated with this study will have access to the data. In future publications of this data, your child will be provided with a participant number or pseudonym to assure their anonymity.

I anticipate minimal risk to your child if you allow them to participate. However, due to your child being asked to provide answers in respect to their perceptions regarding how they communicate with you, they may feel uncomfortable providing answers if they know you will be nearby. Therefore, we ask that you respect your child’s privacy when they are completing the survey instruments and allow them to complete the survey and alone in a room with me. During the interview, we ask that you allow only the child and me to be present in a private location. Your child’s responses will remain confidential and I will not discuss their responses with you or anyone else.

Your child will receive a $20 gift card to Wal-Mart to compensate them for their time to participate in the study. Also, the findings from this study will benefit my discipline’s understanding of adolescents who stutter, as well as our stuttering treatment approaches with this population.
If you have any questions about this study, or your child’s participation, please feel free to contact us (chughes@bgsu.edu or rgabel@bgsu.edu). Our full contact information is provided at the end of this paragraph. You may also contact the Chair, Human Subjects Review Board at 419-372-7716 or hsrb@bgsu.edu, if you have any questions about your child’s rights as a participant in this research. Thank you for your time and consideration in allowing your child to participate in this study.

Charles Hughes, M.S., CCC-SLP  
Speech-Language Pathologist/Doctoral Student  
200 Health Center Building  
Department of Communication Sciences Disorders  
Bowling Green State University  
Bowling Green, OH, 43403  
chughes@bgsu.edu  
(440) 773-5200

Rodney Gabel, Ph.D., CCC-SLP, BRS-FD  
Associate Professor  
242 Health Center Building  
Department of Communication Sciences Disorders  
Bowling Green State University  
Bowling Green, OH, 43403  
grabel@bgsu.edu  
(419) 372-7168

Your signature below serves as your consent to allow your child to participate in this study, if they choose. Furthermore, you agree that (1) you have understood the purpose, procedures, risks and benefits of the current study, (2) have had the opportunity to have any questions answered regarding the study, and (3) you have been informed that your child’s participation is completely voluntary.

Signature of Parent
(Appendix C)

Informed Assent for Participants

Hello,

My name is Charlie Hughes and I'm a student at Bowling Green State University. I'm also a person who stutters. I am doing a study looking at how teenagers who stutter talk with their parents. I also want to look at how much teenagers who stutter talk to their parents about their stuttering. You are being asked to take part in this study because your Mom, Dad, or guardian thought you would be interested because you are part of a stuttering group, or you are a person who stutters between the ages of 12 and 17. I would really like your help in answering some questions.

I do not believe any harmful things will happen to you if you decide to take part in this study. You will receive a $20 gift card to Wal-Mart for taking part in this study. Also, your answers will help other people understand some of the things teenagers who stutter are going through and how they talk to their parents.

If you want to take part in this study, you will be asked to answer some questions on paper and then during an interview with me. You will be asked questions about how you talk with your parents, and how you talk to them about your stuttering. I think it will take you about 45 minutes to an hour to finish answering all questions. After I finish looking over your answers, I will contact you to go over your answers to make sure I understood what you were talking about.

It is your choice whether or not you want to take part in this study. You can stop answering questions at any time you want. You might choose to skip questions, or stop answering questions. Your choice about taking part in this study will not hurt your relationship with Bowling Green State University, any stuttering groups, your parents, or your speech therapist.

When you finish this study, I will take your answers and keep them in a safe place. Only people who are helping me with the study will be able to see your answers, but they will not know who you are. I will be the only person who will know who you are in the study. I will not talk about your answers with anyone. When we write about our study, you will be given a fake name or a number and no one reading our study will see your name.

If you have any questions about this study you can ask your parents or guardian, or you can contact myself (chughes@bgsu.edu, 440-773-5200), my advisor, Dr. Rodney Gabel (rgabel@bgsu.edu, 419-372-7168), or the Human Subjects Review Board at Bowling Green State University (hsrb@bgsu.edu, 419-372-7716) By signing your name below you are letting me know you will take part in the study. After you sign your name, you will begin the study.

______________________________
Signature of Participant
APPENDIX D

Demographic Questionnaire

Instructions: Please write in, or check/circle the boxes for the following questions.

1) Age: ______

2) Boy__________
   Girl__________

3) Which of the following best describes your racial or ethnic background?
   ______ Asian
   ______ Black/African American
   ______ White/Caucasian
   ______ Hispanic/Latino
   ______ Native American
   ______ Other: (please state)

4) How much would you say you stutter? Please circle a choice below.
   A little   A medium amount   A lot

5) Where did you receive your stuttering therapy?
   At School   Outside of school   Both in School and out of School

6) I like the speech therapy I received.
   Strongly Agree   Agree   Neither Disagree or Agree   Disagree   Strongly Agree

7) The speech therapy I received was helpful.
   Strongly Agree   Agree   Neither Disagree or Agree   Disagree   Strongly Agree

8) In the space/box below, please state the person you most think of as being your mother
   (Example: Mother, Grandma, step-mother, etc.)

9) In the space below, please state the person you most think of as being your father
   (Example: father, Grandpa, step-father, etc.)
APPENDIX E

Parent-Adolescent Communication Scale
Adolescent and Mother Form
Howard L. Barnes & David H. Olson

Instructions: Please answer the following questions in regard to the person you most think of as your mother. Report on a scale from 1-5 the amount you agree with each statement with a response of “1” indicating you “Strongly disagree” with the statement, to “5” where you “strongly agree with the statement. Please refer to the response choices below.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. I can discuss my beliefs with my mother without feeling restrained or embarrassed.
2. Sometimes I have trouble believing everything my mother tells me.
3. My mother is always a good listener.
4. I am sometimes afraid to ask my mother for what I want.
5. My mother has a tendency to say things to me which would be better left unsaid.
6. My mother can tell how I’m feeling without asking.
7. I am very satisfied with how my mother and I talk together.
8. If I were in trouble, I could tell my mother.
9. I openly show affection to my mother.
10. When we are having a problem, I often give my mother the silent treatment.
11. I am careful about what I say to my mother.
12. When talking to my mother, I have a tendency to say things that would be better left unsaid.
13. When I ask questions, I get honest answers from my mother.

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14. My mother tries to understand my point of view.
15. There are topics I avoid discussing with my mother.
16. I find it easy to discuss problems with my mother.
17. It is very easy for me to express all my true feelings to my mother.
18. My mother nags/bothers me.
19. My mother insults me when she is angry with me.
20. I don’t think I can tell my mother how I really feel about some things.
APPENDIX F

Communication about Stuttering Inventory
Mother Version (CASI-MV)

Instructions: Please answer the following questions with the person you most think of as your mother. For the following questions, report on how you talk about your stuttering in regard to your mother. Describe on a scale from 1 to 5 the amount you agree with each statement below. A response of “1” means you “strongly disagree” with the statement, and a “5” means you “strongly agree” with the statement. The response choices are below.

<p>| | | | | | |</p>
<table>
<thead>
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<td>1</td>
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<td>5</td>
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<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Neither Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

____ 1. My mother and I talk about my stuttering.

____ 2. I feel comfortable talking with my mother about my stuttering.

____ 3. The talks I have with my mother about my stuttering are helpful.

____ 4. I am happy with the talks I have with my mother about my stuttering.

____ 5. My mother and I talk about the thoughts I have related to my stuttering.

____ 6. My mother knows my thoughts about my stuttering.

____ 7. My mother and I talk about how I feel about my stuttering.

____ 8. My mother knows how I feel about my stuttering.

____ 9. My mother is a part of my speech therapy.

____ 10. I want my mother a part of my speech therapy.

____ 11. My mother and I talk about what I do in my speech therapy.

____ 12. My mother knows what I do in speech therapy.

____ 13. It was my mother’s decision for me to attend speech therapy.
APPENDIX G

Parent-Adolescent Communication

Adolescent and Father Form
Howard L. Barnes & David H. Olson

Instructions: Please answer the following questions in regard to the person you most think of as your father. Report on a scale from 1-5 the amount you agree with each statement with a response of “1” indicating you “Strongly disagree” with the statement, to “5” where you “strongly agree with the statement. Please refer to the response choices below for help.

<table>
<thead>
<tr>
<th>Response choices</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
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<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderate Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

_____ 1. I can discuss my beliefs with my father without feeling restrained or embarrassed.
_____ 2. Sometimes I have trouble believing everything my father tells me.
_____ 3. My father is always a good listener.
_____ 4. I am sometimes afraid to ask my father for what I want.
_____ 5. My father has a tendency to say things to me which would be better left unsaid.
_____ 6. My father can tell how I’m feeling without asking.
_____ 7. I am very satisfied with how my father and I talk together.
_____ 8. If I were in trouble, I could tell my father.
_____ 9. I openly show affection to my father.
_____ 10. When we are having a problem, I often give my father the silent treatment.
_____ 11. I am careful about what I say to my father.
_____ 12. When talking to my father, I have a tendency to say things that would be better left unsaid.
_____ 13. When I ask questions, I get honest answers from my father.
_____ 14. My father tries to understand my point of view.

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15. There are topics I avoid discussing with my father.

16. I find it easy to discuss problems with my father.

17. It is very easy for me to express all my true feelings to my father.

18. My father nags/bothers me.

19. My father insults me when he is angry with me.

20. I don’t think I can tell my father how I really feel about some things.
APPENDIX H

Communication about Stuttering Inventory
Father Version (CASI-FV)

Instructions: Please answer the following questions with the person you most think of as your father. For the following questions, report on how you talk about your stuttering with your father. Describe on a scale from 1 to 5 the amount you agree with each statement below. A response of “1” means you “strongly disagree” with the statement, and a “5” means you “strongly agree” with the statement. The response choices are below.

<table>
<thead>
<tr>
<th>Response choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. My father and I talk about my stuttering.
2. I feel comfortable talking with my father about my stuttering.
3. The talks I have with my father about my stuttering are helpful.
4. I am happy with the talks I have with my father about my stuttering.
5. My father and I talk about the thoughts I have related to my stuttering.
6. My father knows my thoughts about my stuttering.
7. My father and I talk about how I feel about my stuttering.
8. My father knows how I feel about my stuttering.
9. My father is a part of my speech therapy.
10. I want my father a part of my speech therapy.
11. My father and I talk about what I do in my speech therapy.
13. It was my father’s decision for me to attend speech therapy.
APPENDIX I

Semi-Structured Interview Protocol

1) Describe your family for me?
   a. Tell me more about your parents.
      i. (person most considered as father) Father, step-father, grandfather, etc.
      ii. (person most considered as mother) Mother, step-mother, grandmother

2) Tell me if anyone else in your family stutters. If so, who?
   a. How do you talk about stuttering with this person?

3) How do you and parents talk about your stuttering?
   a. Tell me about how you and your father talk about your stuttering.
   b. Tell me about how you and your mother talk about your stuttering.

4) Tell me about how you decided to start coming to speech therapy.
   a. Describe the conversations you and your parents had about you coming to speech therapy.

5) Tell me about how you and your parents talk about your speech therapy?
   a. Mother
   b. Father
   c. What about other family members, friends, etc.

6) Tell me about how your parents deal with your stuttering.

7) How do you talk about your stuttering with other people?
   a. Other family members (brothers, sisters, extended family, etc.)
   b. Friends