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# Perceptions, Thoughts, And Feelings, Of Women Who Stutter In Four Life Domains

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# Walden University

College of Social and Behavioral Sciences

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Nancy Ann Georges

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Walden University 2017

## Abstract

Perceptions, Thoughts, and Feelings, of Women Who Stutter in Four Life Domains

by

Nancy Georges

MA, Franciscan University, 1996

BS, Wheeling Jesuit University, 1991

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Psychology

Walden University

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#### Abstract

This research explored how stuttering affects adult women in aspects of their life in 4 domains: social, occupational, academic, and financial. The literature contains few studies on adult women who stutter, and this research addressed these women regarding the kinds of problems they have encountered in their lives. The results of this phenomenological study identified the perceptions, thoughts, and feelings of adult women who stutter regarding how their speech disorder affected them in the 4 domains. The theoretical orientation used for this study was positive psychology. Positive psychology reflects how women who stutter used positive coping strategies to move forward, despite being confronted by harsh conditions in 4 life domains. This research explored the positive coping strategies these adult women used in each of these areas of their lives. Interview from 10 participants were audio recorded and transcribed. Subsequent coding and analysis of meaning units revealed stuttering consistently interfered with women in 4 life domains: social, financial, academic, and occupational. This study provides educators, families, medical personal, speech-language pathologists, and the public with a better understanding of the personal experiences of women who stutter. This phenomenological study might lead to positive social change through education about stuttering that comes from a personal level of lived experiences. This work contributes to the advancement of science for future studies to research other aspects of stuttering that will improve the quality of life for these women.

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# Dedication

This study is dedicated to Natasha.

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# Chapter 1: Introduction to the Study

#### Introduction

The National Institute on Deafness and Other Communication Disorders (2010) reported that approximately 7.5 million people in the United States experience problems with their speech, and 3 million Americans stutter. The onset of developmental stuttering occurs in the formative years of a person's life prior to the age of 4 to 6 years (Drayna, Kilshaw, & Kelly, 1999). If the condition appears as an adult, it is usually the result of a brain trauma, lesion, or cardiovascular accident (Chang, Synnestvedt, Ostuni, & Ludlow, 2009).

Stuttering is a condition that does not have a single etiology. However, scholars have theorized that stuttering is linked to an underdeveloped speech motor system with subsystems that interplay with this network (Chang et al., 2009). There are many theories regarding the origins of stuttering. These theories have led to continued research to help develop behavioral interventions and psychopharmacologic treatments to manage this abnormal speech behavior. This phenomenological-oriented study explored the lived experiences of adult women who stutter. In a similar study of women who stutter, Silverman (1982) concluded that these women were stereotyped as being insecure, yielding, and impulsive.

Many researchers have validated the problems that people who stutter experience in life in terms of being stigmatized and stereotyped, as evidenced by public opinion about stuttering (St. Louis, 2012). For instance, when speech is disrupted, much of the thought content is lost in the verbal transmission, which causes people who stutter to be

misunderstood by others because of negative listener reactions (Hughes, Gabel, Irani, & Schlagheck, 2010). For most people, speech is something they take for granted; for a person who stutters, talking is something that can be mentally, emotionally, and psychologically exhausting. The difficulty people who stutter endure to be fluent when they speak might give the wrong impression to someone who does not stutter (Perry, 2009).

Adult woman who stutter experience significant pain and suffering because of their stuttering in four domains: social, occupational, academic, and financial (Beilby, Byrnes, Meagher, & Yaruss, 2012; Craig, 2010; Craig & Tran, 2006; Emmons, 2009; Silverman, 1982; Van Borsel, Brepoels, & DeCoene, 2011; Yaruss & Quesal, 2004). This phenomenological study identified the perceptions, thoughts, and feelings of adult women who stutter regarding how their speech disorder affected them socially, occupationally, academically, and financially. The study also explored the positive coping strategies that these adult women used in each of these four areas of their lives. The results of this study provide educators, families, medical personal, speech pathologists, and the public with a better understanding of the personal experiences of adult women who stutter. Education about stuttering that comes from the lived experiences of adult women who stutter can lead to positive social change. The goal of the study was to deepen public appreciation regarding stuttering and the trials and tribulations that someone who stutters goes through in life, as well as to educate families about the social, occupational, academic, and financial problems that stem from this disability in adult women who stutter.

#### **Background**

Developmental stuttering is listed in the *Diagnostic and Statistical Manual of Mental Disorders 5* (American Psychiatric Association, 2013). The etiology of stuttering is controversial (Lawrence & Barclay, 1998). Theoretical perspectives about stuttering have alluded to an ill-timed production of speech, which is caused by neurophysical dysfunction (faulty neurocircuitry in the brain). The stuttering disorder usually resolves before early adulthood. Developmental stuttering is a disorder of speech that affects 1% to 2% of the adult population (Drayna et al., 1999; Watkins, Smith, Davis, & Howell, 2008). Drayna et al. (1999) estimated that at least 15% of the population stuttered during childhood but then recovered from stuttered speech by adolescence. Lawrence and Barclay (1998) used the World Health Organization's (WHO, 1980) definition of *stuttering*:

he or she wishes to say but, at the same time, may have difficulty saying it because of an involuntary repetition, prolongation, or cessation of sound. (p. 1)

Stuttering is divided into developmental disfluency (which many children experience) and pathologic disfluency (Lawerence & Barclay, 1998). Lawerence and Barclay (1998) defined *developmental disfluency* as the repetition of whole words and phrases and *stuttering* as the repetition of word parts and the prolongation of sounds. Developmental dysfluency and stuttering each have distinct characteristics regarding the flow of speech, prolongations, pauses before and after speech, tension, stress, frustration, eye contact, tempo, airflow, and articulation.

a disorder in the rhythm of speech in which the individual knows precisely what

Stuttering often occurs when a child is overly anxious or excited, which causes disfluency (Lawerence & Barclay, 1998). This kind of mental overprocessing causes disfluency in a child but usually declines with age (Lawerence & Barclay, 1998). However, if the normal disfluency persists, problems with speaking become evident, as indicated by the rise in the inflection or tone in a person's voice (Lawerence & Barclay, 1998). Moreover, prolongations of syllables occur in speech, and words take longer to be produced (Lawerence & Barclay, 1998). In this situation, the cause of the stuttering is most likely pathologic (a serious speech problem) rather than developmental (Lawerence & Barclay, 1998).

Yairi and Ambrose (2013) asserted

the onset of stuttering, the incidence and prevalence of the disorder in the general population can vary greatly, depending on the time-window observed. In a narrow 24-month window between the 2nd and 4th birthday, it is quite likely that the incidence (only new cases) and prevalence (those who stutter at the time of a survey) figures will be closer than at any older ages. The reason is that as new cases emerge, they are partly balanced by existing cases who recover naturally. According to current knowledge, this particular time window encompasses the peak of both stuttering onsets and natural recovery. Hence, in general, surveys that cover this age bracket provide a better indication of life-time incidence than those that begin coverage at more advanced ages. Looking at a 24-month window between the 15th and 17th birthday, however, the prevalence of stuttering will exceed its incidence because, as we know, new onsets are minimal for that time-

window. There are, then, several ways of investigating or analyzing incidence and prevalence. In terms of incidence, it may be reported for specific periods, averaged across several periods, or across the lifespan. (p. 72)

The male-to-female ratio for this communication disorder is 4:1, and the reason for the differences in sexes remains unknown (Bloodstein, 1995).

Peters and Starkweather (1990) posited that cognitive development of language has a great influence on fluency. Children seem to experience difficulty with articulation of words at the beginning of syntactic units when speech becomes more complex (Peters & Starkweather, 1990). Stuttering might occur when an individual is in a hurry or is attempting to complete a task that requires advanced perception and thought (Peters & Starkweather, 1990). As academic pressures increase because of the advanced course content involved in learning, the school-aged child who stutters may struggle from the pressure of language acquisition (Peters & Starkweather, 1990). The problem is related to cerebral competition that impairs fluent speech. Speech motor controls and language acquisition both contribute to stuttering (Peters & Starkweather, 1990). Researchers have hypothesized that an imbalance exists between motor controls and language formation, which causes a delay in speech or poor production of language (Peters & Starkweather, 1990).

Peters and Starkweather (1990) asserted that as language becomes more complicated for people who stutter and knowledge increases, fluency becomes more irregular; more complex language requires a larger lexicon and more syntactic forms. This situation hinders people who stutter from becoming more fluent, because of the

great amount of information that becomes available to them as they advance in age (Peters & Starkweather, 1990). Performance tasks, such as word finding and sentence construction, improve fluency by increasing the rate of language performance (Peters & Starkweather, 1990). Peters and Starkweather stated that people with a large vocabulary or syntactic variation might struggle in performing a motor activity, such as speaking fluently, because they cannot control the cognitive load. Motor activities and simple sentence construction are not easy tasks for people who stutter, whereas most individuals execute these tasks without any difficulty (Peters & Starkweather, 1990).

There is a gap in the literature; few researchers have examined exclusively the pain and suffering of adult women who stutter. Women who stutter are stereotyped as being nervous, fearful, shy, and insecure (Silverman, 1982). The broader consequences for adults who report stuttering to be a chronic health condition can be life impairing socially, occupationally, academically, and financially (Franic, Bothe, & Bramlett, 2012). Long-term effects of stuttering increase the risk that someone who stutters will develop depression or have low self-esteem (Betz, Blood, & Blood, 2008). Betz et al. (2008) asserted that people who stutter may use avoidance behaviors to stay away from social situations, develop feelings of vulnerability, self-judge, and are fearful.

Studies conducted on stuttering have focused on general factors such as treatment efficacies, problems that people who stutter endure in life (social effects), etiology, quality of life, stereotypes (e.g., the attitudes and perceptions of people who stutter), differences in sex ratios for people who stutter, prevalence of stuttering, pharmacology of stuttering, and the like (Alm & Risberg, 2007; Beilby et al., 2012; Betz et al., 2008;

Chang et al., 2009; Devulapalli & Nasrallah, 2009; Kidd, Kidd, & Records, 1978; Maguire et al., 2009; Plexico, Manning, & Levitt, 2009; Riley, Riley, & Maguire, 2004, Yaruss & Quesal, 2004). However, very few studies have identified the suffering of adult women who stutter over a lifetime. A reason for the gap in the literature might be because stuttering is more prevalent in men than women (Yairi & Ambrose, 2013). Through this phenomenological study, I identified the perceptions, thoughts, and feelings of adult women who stutter regarding how their speech disorder affected them socially, occupationally, academically, and financially. I also explored the positive coping strategies that these adult women have used in each of these four areas of their lives.

# **Problem Statement**

I concentrated on the severe difficulty that adult woman who stutter have throughout their lives in four domains: social, occupational, academic, and financial. For adult women who stutter, it is important to understand how this speech disfluency affects them socially, emotionally, and mentally throughout their lives. This phenomenological study filled a gap in the literature on four components that affect functioning in adult women who stutter over their lifetimes.

Palasik, Gabel, Hughes, and Rusnick (2012) and Klein and Hood (2004) studied the kinds of problems that people who stutter endure in the workforce. Klein and Hood addressed how people who stutter may be obstructed in employment settings because of the way their supervisors or fellow employees view them in terms of job performance, promotion opportunities, competency, or intelligence. Klein and Hood failed to exclusively investigate the perceptions of adult women who stutter on the basis of their

subjective experiences in employment settings. My focused on the perceptions, thoughts, and feelings of adult women who stutter in the workplace and the positive coping strategies they reported.

Because the mainstay of therapy for stuttering is based on consistent, frequent visits over extended periods of time, the result is a high cost of therapy. Financial hardship for fluency treatment is a concern for people who stutter (Blumgart, Tran, & Craig, 2010a). The cost for chronic stuttering care is expensive. Blumgart et al. (2010a) concentrated on the financial burdens that people who stutter encounter, such as continued speech fluency training, other kinds of treatment, technology for speech aid devices, attending speech conferences, and medication management of the disfluency. Even though Blumgart et al. outlined personal financial constraints in their investigation, they did not address the personal perceptions of adult women who stutter who endure these kinds of hardships financially, as well as the positive coping strategies they use.

Verbal ability is necessary to be successful in school (Blumgart, Tran, & Craig, 2010a, 2010b). People who stutter have negative social experiences in the formative years that might lead to problems in academia, because they require verbal ability to be successful in school. A person who stutters severely might not have good social skills (Blumgart et al., 2010 a, 2010b). This would cause a person who stutters not to take part in school-based requirements such as speaking aloud in class, discussing classroom tasks with their fellow classmates, participating in public speaking, or asking and answering questions when class is in session (Blumgart et al., 2010 a, 2010b).

O'Brian, Jones, Packman, Menzies, and Onslow (2011) investigated whether

stuttering severity affected a person's ability to learn in a traditional classroom setting and whether people who stutter typically pursue higher levels of learning. They reported that approximately 50% of adults who stutter are eligible for a diagnosis of social phobia, because their stuttering interferes with their ability to learn in a traditional classroom setting as well as their ability to continue with their education on a college level. O'Brian et al. also showed that people who stutter have likely endured being bullied, teased, or socially ostracized. Moreover, these kinds of actions contribute to a diminished sense of self-confidence and lower academic grades. These negative experiences influence whether people who stutter continue with higher education and forecast academic achievement (O'Brian et al., 2011). My study differed from O'Brian et al. because it explored the personal thoughts, ideas, and feelings of only adult women who stutter socially, occupationally, financially, and academically, as well as the positive coping strategies they have used.

Beilby et al. (2012) examined the quality of life with 10 individuals who had a relationship with a partner or spouse who was disfluent. Beilby et al. (2012) used a mixed method design to investigate the lived experiences of people who stutter through central themes about romantic personal partnerships. The themes that stood out in the Beilby et al. analysis were feelings of social anxiety and negative reactions the people who stuttered felt about their stuttering. Other central themes reported about the couples' experiences with stuttering included avoidance, embarrassment, acceptance, confidence, cultural impacts and influences, denial, fear, frustration, others reactions, relationships and dating, school-aged experiences, withdrawal, support, treatment, and relapse (Beilby

et al., 2012). My study differed from Beilby et al. because it used a qualitative method to investigate the personal lived experiences of adult women who stutter.

# **Purpose of the Study**

I used a phenomenological study to identify the perceptions, thoughts, and feelings of adult women who stutter regarding how their speech disorder has affected them socially, occupationally, academically, and financially. I also explored the positive coping strategies that these adult women have used in each of the four areas of their lives.

Few researchers have studied women who stutter. Silverman and Van Opens (1980) pointed to differences between men and women who stutter, such as teachers making recommendations for speech therapy (i.e., girls are less likely to be referred for speech therapy than boys) as well as differences between the sexes for treatment preferences and approaches to interpersonal communication patterns, demographics, and stereotyping. These dissimilarities between men and women are unique reasons women might have different experiences compared with men in the four domains as well their ability to develop as diverse positive coping strategies.

#### Social

People who stutter have difficulty functioning in their social environments.

Developing socially is an important part of human growth and development. This includes having friends, engaging in romantic relationships, or being able to take part in activities such as speaking with a group of peers (O'Brian, Jones, Packman, & Onslow, 2011). When the normal process of developing a social network is impeded as an adolescent, it is likely that people who stutter will develop interpersonal problems that

cause them to suffer emotionally their entire lives (O'Brian et al., 2011). Interviewing adult women who stutter provided an opportunity to examine how they have been affected by this speech disorder and how they have coped. Tran, Blumgart, and Craig (2011) identified the personal feelings of adults who stuttered chronically. They discussed negative mood states that stem from having to cope with the personal stress of having a communication disturbance. They described the following negative mood states: pain, discomfort, being overly sensitive to others' perceptions, fear from loss of control, anxiety, nervousness, tension, embarrassment, hostility, aggression, irritability, alienation, sadness, loneliness, and depression.

# **Occupational**

Stuttering interferes with a person's chance of being gainfully employed because of negative perceptions that employers have about people who stutter (Klein & Hood, 2004). When people who stutter are not able to obtain adequate employment, their basic survival needs are threatened because of discrimination. This discrimination diminishes people's quality of life and can cause significant hardships for adult women who stutter by interfering with certain aspects of employment and can affect quality of life (Yaruss, 2010).

Klein and Hood's (2004) examination of the occupational effects of stuttering is comparable with my study because it showed the negative impact that stuttering has on a person in terms of job performance and employment. A heterogeneous group of 230 people who stutter completed a 17-item survey to assess the effect stuttering has on employment and job promotion from their personal experiences (Klein & Hood, 2004).

The results revealed more than 69% of people who stuttered believed that stuttering interfered with their chance of being hired for a new job or being promoted in their current job position (Klein & Hood, 2004). Similarly, people who stutter often deny themselves a chance to begin a new job and turn down propositions for any chance for job advancement. Klein and Hood's results also showed that more than half of the participants agreed that stuttering interfered with their job performance, and 80% of the participants agreed that when applying for a job, a person who does not stutter will be viewed more positively over someone who stutters; 8% of the participants disagreed that they would be discriminated against for the same job position as a person who does not stutter. Overall, women were less likely than men to believe that stuttering would adversely affect job performance or being gainfully employed (Klein & Hood, 2004).

Biases about people who stutter are shaped from negative perceptions about people who stutter and cause discrimination in the workforce. The Americans with Disabilities Act of 1990 protects people who stutter, but it is often difficult to prove that they are being discriminated against (U.S. Department of Justice, Civil Rights Division, 2010). Perry (2009) discussed negative encounters that people experience in the work place at the National Stuttering Association Conference Research and Symposium. Perry asserted that people who stutter have been discriminated against because of their speech impediment, and they attempt to conceal the disfluency for fear of being dismissed from their place of employment. People who stutter endure harassment in the workplace by their supervisors due to general intolerance for the disorder (Perry, 2009). Because of negative stereotypes, people who stutter are denied opportunities for potential job

promotion and public speaking assignments at work and sometimes are not considered eligible for a job interview (Perry, 2009).

#### Academic

Stuttering interferes with people's ability to learn in a traditional classroom setting as well as to continue with their education at the college level (Abdalla & St. Louis, 2012). People who stutter have negative social experiences in their formative years that may lead to problems in academia because they need verbal ability to be successful in school (Abdalla & St. Louis, 2012). A person who stutters might not have good social skills, which may deny him or her the opportunity to take part in school-based requirements such as speaking out loud in class, discussing classroom tasks with fellow classmates, speaking in public, or asking and answering questions when class is in session (Abdalla & St. Louis, 2012).

St. Louis, Lubker, Yaruss, and Aliveto (2009) asserted that members of the general public have stereotypical views of people who stutter because they are not educated about this speech disorder. Abdalla and St. Louis (2012) investigated the beliefs and reactions of Arab educators toward students who stuttered. A consistent negative perception toward people who stutter showed that teachers believe people who stutter are nervous, shy, excitable, and fearful. Further, teachers had misconceptions about the etiology of stuttering (Abdalla & St. Louis, 2012). These kinds of preconceived notions by educators regarding stuttering hinder a disfluent person's overall academic experience by inflicting a sense of self-doubt and lack of confidence in schoolchildren. These

feelings of inferiority and insecurity can affect an adult woman who stutters by holding her back from self-actualization.

O'Brian et al. (2011) found that in the formative years of development, it is probable that a person who stutters has endured being bullied, teased, and socially isolated; has low self-confidence; and achieves lower academic grades. These negative experiences might influence whether people who stutter continue with higher education and might forecast academic achievement. Similarly, O'Brian et al. (2011) reflected on the positive and negative experiences of people who stutter.

#### Financial

McAllister, Collier, and Shepstone (2012) investigated whether the effects of stuttering harm a person financially or occupationally. People who stutter may use a maladaptive coping strategy (e.g., avoidance) so that they do not have to speak in front of a group of their peers (McAllister et al., 2012). They avoid higher education and seek out jobs that do not require a high level of skill or fluency (McAllister et al., 2012). This kind of employment situation does not provide as much income for a person who stutters (McAllister et al., 2012). Therefore, adult women who stutter are often at the lower end of the socioeconomic spectrum, where they might not be able to function autonomously (McAllister et al., 2012).

Blumgart et al. (2010a) conducted 2- to 3-hour interviews with 200 men and women who stutter. They investigated the personal financial costs incurred by people who stutter in developing self-help treatments, attending conferences, and seeking help for other kinds of problems associated with stuttering (e.g., fatigue, social anxiety, and

reduced social, emotional, and mental health functioning). The results of the research showed that 94% of the participants received some kind of treatment for their stuttering (Blumgart et al., 2010a). Blumgart et al. reported that the majority of the participants spent at least \$5,478 on costs related to their stuttering in the past 5 years. Further, 50% of the participants felt that their stuttering made it hard to find a job, 37.5% felt that they had not been promoted because of their communication disorder, and 75% felt as though they had been dismissed from their job because of stuttering (Blumgart et al., 2010a). No significant differences were found between men and women who stuttered (Blumgart et al., 2010a).

## **Research Questions**

I based the research questions on the subjective experiences of adult women who stutter in four domains: social, occupational, academic, and financial. Kidd et al. (1978). suggested research into the self-reported experiences that people who stutter endure in different aspects of their lives or any kind of limitations that impede them from leading what is deemed to be a healthy life. Therefore, the following research questions guided this research:

- 1. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *social interactions*, and what positive coping strategies have they used?
- 2. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *occupations*, and what positive coping strategies have they used?

- 3. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *formal education*, and what positive coping strategies have they used?
- 4. What are the perceptions and experiences of adult women who stutter regarding the stressors on their *financial matters*, and what positive coping strategies have they used?

# **Theoretical Framework for the Study**

The theory of positive psychology supported this study of adult women who stutter regarding their experiences in four domains (i.e., social, occupational, academic, and financial). Seligman and Csikszentmihalyi (2000) defined *positive psychology* as valued subjective experience that harnesses human strengths. Positive psychology focuses on an individual's positive attributes to strengthen weakened ego systems, thereby preventing mental illness. Seligman and Csikszentmihalyi stated

The exclusive focus on pathology that has dominated so much of our discipline results in a model of the human being lacking the positive features, which make life worth living. Hope, wisdom, creativity, future mindedness, courage, spirituality, responsibility, and perseverance are either ignored or explained as transformations of more authentic negative impulses. (p. 1)

Positive psychology enables happiness, autonomy and self-regulation, optimism and hope, wisdom, talent, and creativity to come to fruition (Schueller & Seligman 2010). Positive psychology allows people to become empowered by identifying their strengths and applying interpersonal skills in the workplace, education, health, relationships, and

finances (Schueller & Seligman 2010). An adult woman who stutters learns to overcome adversity in life by improving self-worth and becoming more optimistic than pessimistic (Schueller & Seligman 2010). In combating the weakness of an individual's inability to communicate fluently, people who stutter are taught to overcome their language flaws by building self-confidence that will reduce the obstacles they face in everyday life. Schueller and Seligman (2000) posited that people can thrive in their environment by using the tenets of positive psychology to find inner strength so that they increase their happiness and diminish depression that stems from negative life experiences. Positive psychology promotes the power of positive thinking; thinking positively can be used as a preventative measure against pathology, such as depression or substance abuse by nurturing what is best in someone (Schueller & Seligman 2010). According to Bodenhamer (2006), implementing the techniques of positive psychology can improve a person's self-confidence and self-esteem, thereby lessening the chance of having interrupted speech. The focus of positive psychology can be shifted from being used as a therapy to treat disease to being used to harness individual positive attributes to overcome stuttering (Bodenhamer, 2006).

The base of empirical research has been growing supporting the positive psychology view that confidence, trust, and faith build on individual strengths, which lead to a better quality of life. Seligman, Steen, Park, and Peterson (2005) explored the possible relationship between the identification of signature strengths and a concentration on experiences eliciting feelings of gratitude. Participants reported experiencing higher levels of happiness and lower levels of depression when character strengths were related

with experiences of appreciativeness (Seligman et al., 2005). Dunn and Dougherty (2005) demonstrated how positive psychology and proactive coping skills helped people cope with problems associated with traumatic injuries resulting in limb amputation. Greater measured levels of self-efficacy, mastery, and optimism was associated with a higher likelihood that the individuals accepted their injuries as an uncontrollable variable, which made them mentally accept what they were unable to change (Dunn & Dougherty, 2005). Subsequently, this attitude helped them to make the necessary transition to embark on a new way of life (Dunn & Dougherty, 2005). Resiliency is another type of affirmative characteristic that has positive correlations with people's capability to adjust to a traumatic injury or an acute psychological stressor that has occurred in their life (Dunn & Dougherty, 2005). Adjusting to a disability, whether it is a speech disorder or physical injury, is no easy task. However, having a positive outlook on life helps a person accept his or her disability and might prevent another problem from developing that could make matters worse (Dunn & Dougherty, 2005).

According to positive psychology theory, examples of possible strengths include courage, hope, wisdom, and perseverance (Seligman, 2002). With the assistance of a speech therapist trained in the practices of positive psychology, people who stutter engage in careful self-analysis and decision making about how they can live productive lives (Georges, 2017).

### **Nature of the Study**

The purpose of this study was to determine the self-perceived lived experiences of people who stutter as adults. Interviews with 10 adult women participants provided the

in-depth information to serve as a catalyst for further research to improve a person's quality of life. The participants in this study met the following inclusion criteria: women who experience stuttering who are between the ages of 21 and 78 years. The focus of the study was on developmental stuttering, which occurs in the formative years of life, typically between the ages of 4 and 6 years (Drayna et al., 1999). The sample size consisted of 10 women who stutter who began to stutter before the age of 4 to 6 years.

An expert panel consisting of two experts who worked specifically in the field of stuttering helped develop the interview questions to answer the research questions in this study. The experts' insights into the effects of stuttering on their patients contributed greatly to finalizing the list of interview questions. In this qualitative phenomenological study, I conducted face-to-face interviews that lasted up to 60 minutes. I audiotaped interviews to gather data regarding participants' social, academic, occupational, and financial experiences. I analyzed the transcripts to determine singular natural meaning units made by the participants (Stones, 1985).

#### **Definitions**

Adult women who stutter: Women 21 to 65 years of age who stutter (Erikson, 1958).

Blocks: Stoppages of sound and movement (Guitar, 2009).

Cluttering: Rapid speaking that is difficult to understand (Guitar, 2009; St. Louis, Lubker, et al., 2009).

Disfluency: Interruption in the forward flow of speech with interruptions and repetitions (Bloodstein & Bernstein Ratner, 2008).

*Repetitions:* The nature of being stuck on a sound and continuing to repeat it until the following sound can be reproduced.

*Prolongations:* Sound or airflow continues but movement of the articulators is stopped.

Stammering: A speech disorder defined by mispronunciation, hesitation, and repetition of sounds, as well as by substitution or transposition of certain consonants, especially *l*, *r*, and *s*. (*The American Heritage Stedman's Medical Dictionary*, n.d.).

Stuttering: A speech disorder defined by frequent prolongations, repetitions, or blocks of spoken sounds and syllables, as well as anxiety and cognitive avoidance (Maguire, Yeh, & Ito, 2012).

# **Assumptions**

The findings from this study represent the experiences of adult women who stutter. As the researcher, I assumed that the participants were candid as they shared their experiences about how stuttering has affected them socially, occupationally, academically, and financially. I also assumed that there were differences in the attitudes of adult women who stutter regarding their disfluency in the four domains.

### **Scope and Delimitations**

The scope and delimitations of this study entailed the following:

- Some of the participants had the opportunity to belong to a stuttering group or obtained fluency training to improve their quality of life.
- This sample did not have a good representation from minorities or ethnic groups.

# Significance of the Study

This study explored the personal experiences of adult women who stutter socially, occupationally, academically, and financially. This area has not been widely studied. The lay population may be interested in learning about the experiences of others who stutter so that they can better understand this communication disorder. Healthcare workers, educators, and other professionals may obtain useful information about stuttering by understanding the kinds of struggles people who stutter encounter in life so they can modify their programs to become sensitive to the problems that adult women who stutter endure. Healthcare is becoming increasingly more focused on preventative care rather than exclusively reactive care (Reeve, 2010), which would be cost-effective for women who stutter. Therefore, healthcare practitioners and insurance companies may be interested in additional information to prevent the pain and suffering that adult woman who stutter encounter in life (i.e., improve access and opportunities, as well as tailor outreach programs (Reeve, 2010).

# **Summary**

When people are not able to engage in normal dialogue with others, feelings of unrest and anxiety emerge (Tran et al., 2011). They may find themselves in awkward situations and avoid social contact because of their disfluency. Stuttering can lead to social isolation, causing impairment in self-esteem or self-worth (Tran et al., 2011). With the continued efforts of researchers, the quality of life might be improved for those who suffer from this fluency disorder. Stuttering is a traumatic experience that people face in these four domains (social, occupational, academic, and financial). This study provides

information that may lead to more appreciation about the kind of suffering that people who stutter, as well as their families, endure. This research will help educators, employers, the public, and healthcare workers appreciate the personal lived experiences of adult women who stutter as well as preventing problems for children and adolescents who stutter as they embark into their adult lives. The results of this study did not provide any new information regarding treatment in four life domains.

# Chapter 2: Literature Review

I identified perceptions, thoughts, and feelings of adult women who stutter regarding how their speech disorder has affected them in the social, occupational, academic, and financial domains. I interviewed adult women who stutter, and I asked them about how their lives have been affected by their stuttering to identify the lived experience of women who stutter regarding the four domains. Chapter 2 is a review of the current literature regarding the perceptions and experiences of people who stutter in four domains: social, occupational, academic, and financial.

# **Literature Search Strategy**

I derived the literature for this study from several academic research databases, such as Science Direct, Google Scholar, Medline, NIH info, PsycARTICLES database, Academic Search Complete Data Base, Business Source Complete, CINAHL PsycINFO, and online dissertations. I used an arrangement of terms for the search engines, such as stuttering, personal experience, language and speech, developmental, neurological causes of stuttering, embarrassment, stuttering causes, discrimination, impact of stuttering, subjective experience of people who stutter, adult women who stutter, stuttering related anxiety, stuttering treatment, impact of stuttering, stuttering stereotyping, pain and suffering, employment problems, financial matters, educational issues, a social problems related to stuttering stressors, positive coping strategies, and positive psychology. Other research criteria incorporated similar mixtures of expressions, including speech, disability, and disturbance of language as they relate to the four domains. I restricted the results of the research benchmarks to scholarly journal articles.

#### Relevance of the Problem

Few studies have been conducted on women who stutter, possibly because of the prevalence of the disorder in men (Bloodstein, Bernstein, & Ratner, 2008). Therefore, the relevance of the problem was to identify the perceptions, thoughts, and feelings of how stuttering affects women who stutter regarding the four domains. The goal for this study was to provide educators, families, medical personal, speech pathologists, and the public with a better understanding about the personal experiences of women who stutter. This phenomenological study included interviews with women about their lived experiences of stuttering in terms of their feelings and reactions, following the guidelines for conducting interviews that Moustakas (1994) outlined. The goal for this study was to broaden public awareness regarding the pain and suffering that women who stutter endure in life socially, occupationally, academically, and financially. I also explored the positive coping strategies that these adult women have used in each of the four areas of their lives.

Stuttering is a condition that does not have a single etiology. However, researchers have theorized that stuttering is linked to an underdeveloped speech motor system with subsystems that interplay with this network (Chang et al., 2009). The onset of developmental stuttering occurs in the formative years of life, typically between the ages of 4 and 6 years (Drayna et al., 1999). If the condition first appears as an adult, it is usually the result of a brain trauma, lesion, or cardiovascular accident. The many theories regarding the origins of stuttering have led to continued research to help develop behavioral interventions or psychopharmacologic treatments to manage this speech disfluency (Chang et al., 2009). Elements are associated with this fluency disorder in the

fields of psychology; speech–language pathology; and certain hormonal, endocrinological, neurological, or genetic factors that make successful interventions difficult (Kang et al., 2010; Maguire et al., 2010; Plexico, Manning, & DiLollo, 2010; Yairi & Ambrose, 2013).

I used phenomenological-oriented research to explore the lived experiences of women who stutter. When people are not able to engage in normal dialogue with others, feelings of unrest and anxiety may emerge (Kraaimaat, Vanryckeghem, & Dam-Baggen, 2002). They may find themselves in awkward situations and avoid social contact because of their stuttering. Stuttering can lead to social isolation, impairing self-esteem or self-worth (Beilby et al., 2012; Blumgart, Tran, Yaruss, & Craig, 2012).

These kinds of emotional problems may prevent people who stutter from leading normal lives and may interfere with most aspects of daily living, such as employment, relationships, and education (Blumgart et al., 2012). The continued efforts of researchers might improve the quality of life might for people who have this fluency disorder. The results of this study may lead to improved appreciation for the suffering of people who stutter and earlier interventions that would prevent stuttering from developing and save people who stutter from long-term pain and suffering. Additional treatment modalities could empower people who stutter, helping them to be more successful in the four domains being studied.

The condition of stuttering causes social anxiety in people who stutter, as well as negative attitudes from people who do not stutter (Kraaimaat et al., 2002; St. Louis, Reichel, Yaruss, & Lubker, 2009). The results of this study may provide more

appreciation of the kind of suffering women who stutter and their families endure. In the best of situations, the study may enhance proactivity for speech–language pathologists or promote future studies geared toward developing ways to prevent a diminished quality of life for women who stutter (Blumgart et al., 2012; Plexico et al., 2005). The results of my study replicated the general negative experiences of adults who stutter. However, this study differed from other studies by researching the personal experiences of women exclusively and how stuttering has impacted them in 4 life domains; as well as the coping strategies they have implemented to help them have a good quality of life (Georges, 2017).

Past studies of people who stutter have shown that not enough research is aimed at improving the quality of life for people who stutter. People who stutter are affected in employment settings, relationships, education, and finances because of negative public opinions regarding this speech disorder (Blumgart et al., 2012; Howell, 2004; St. Louis, Reichel et al., 2009). Because of the hardships people who stutter endure in the four domains, the quality of the therapeutic alliance is a critical component in treatment (Plexico et al., 2010). This therapeutic alliance is looked on as a collaborative relationship between the speech pathologist and the patient (Plexico et al., 2010). Speech—language pathologists who show concern, understanding, and empathy for their patients appear to be effective in treating this fluency disturbance, as opposed to speech teachers who are insensitive to their clients' needs and lack competence in this area (Plexico et al., 2010). When speech—language instructors are empathetic toward a person

who stutters, they are able to appreciate the effects this speech disfluency has on someone socially, occupationally, academically, and financially.

Other distinctive predictors for therapy success include the credibility of the speech-language pathologist, who should be aware of the kinds of problems that occur for people who stutter at different developmental levels. These problems include bullying behaviors that take place in school (Blood, Boyle, Blood, & Nalesnik, 2010). Bullying is an indicator of how social, academic, occupational, and financial problems for adults who stutter begin as early as preschool. Bullying can become a serious problem that may increase the likelihood for poor school performance, lower self-worth, depression, anxiety, or increased school dropout rates (Blood et al., 2010). These attributes that develop in people who stutter may have long-term negative effects that impede their success in life (Betz et al., 2008). People who stutter who are victims of bullying are at risk for developing long term psychological distress (Blood et al., 2010). Therefore, speech-language pathologists who work with people who stutter must be aware that bullying exists in schools and must have coping strategies in place for bullying. Interventions help people who stutter prevent problems with self-esteem and avoidance behaviors.

School personnel should consider the point of view of a person who stutters by first understanding how he or she feels about the stuttering in terms of his or her own attitudes and beliefs. This can be challenging for educators and speech—language pathologists, because they might not appreciate the long-lasting pain and suffering that bullying and ostracizing have on people who stutter. These types of negative behaviors

affect people who stutter in the four domains featured in this study (Boyle, Blood, & Blood, 2009). Professionals should take an active role to advocate for a person who stutters by taking the problem seriously and providing interventions to protect people who stutter from being bullied in school and discriminated against as adults.

According to Betz et al. (2008), educational and social problems for adults who stutter begin at the preschool age through negative social experience. The term *people* who stutter carries a damaging meaning in terms of the attitudes and beliefs that people who do not stutter have about someone who has a communication disorder (Betz et al., 2008). Undesirable stereotypes toward people who stutter begin at an early age, causing people who stutter to have feelings of vulnerability, self-judgment, fear, or pressure to speak fluently (Betz et al., 2008). Concomitantly, the threat of the stereotype of people who stutter causes anxiety, impairs confidence, and affects performance outcomes in people who stutter (Betz et al., 2008).

## **Conceptual Framework**

### **Current Research on Theory**

Stuttering causes pain and suffering in people who stutter because of the negative public views regarding this speech disorder (Tran, Blumgart & Craig, 2011). Positive psychology theory is not being applied in diverse settings to people who stutter, as evidenced by the negative beliefs and opinions toward people who stutter (St. Louis, 2012). The theoretical framework for this study used concepts from positive psychology, including the use of positive coping strategies by women who stutter.

#### **Theoretical Basis**

The current study addressed women who stutter and was supported by positive psychology (Seligman & Csikszentmihalyi, 2000). I chose positive psychology for this study because this theory reflects how human beings prosper in the face of adversity. I based my goal for this study on the work of Seligman and Csikszentmihalyi (2000). The goals I established for the study were to identify and define the human strengths and virtues that make life worth living for women who stutter and that allow such individuals to thrive.

The theoretical orientation of positive psychology enhanced knowledge and understanding regarding the kinds of positive coping strategies that adult women who stutter use to avoid social pain in everyday life. As mentioned previously, women who stutter are an understudied population, which may be because more men stutter than women (Kidd et al., 1978). Positive psychology was chosen to help people who do not stutter change the way they view people who stutter by helping to appreciate their positive attributes instead of focusing on their disfluent speech. This theory may help to develop an appreciation regarding the positive coping strategies that women who stutter use to avoid stressors in life and thereby possibly change the negative impressions of people who stutter (Menzies, Onslow, Packman, & O'Brian, 2009).

### **Origin of Theory**

The aim of positive psychology is to strengthen weakened ego systems in people or communities (Seligman & Csikszentmihalyi, 2000). Positive psychology focuses on inner strength and does not dwell on what is perceived to be internal weakness that

prevents people from achieving their true potential (Leontiev, 2013; Mills, Fleck, & Kozikowski, 2013).

## Assumptions, Application, and Research Analysis for Positive Psychology

Members of society make assumptions that people who stutter are not intelligent, are socially inept, are anxious, or lack self-confidence (Abdalla & St. Louis, 2012).

Negative worldviews regarding people who stutter are addressed in the four domains covered in this study. The study was based on women who stutter and the positive coping strategies they apply within a positive psychology framework.

### The Four Domains

The social domain. The application of positive psychology in social situations might diminish fear and anxiety in people who stutter because of the strain it takes to speak fluently. When a person appears nervous or uncomfortable, this in turn might make others uncomfortable because they do not know how to react toward someone with disfluency (Iverach, O'Brian, Jones, Block, Lincoln, & Harrison, 2009) This could be why people who stutter may be considered undesirable candidates to have as a friend or partner for a person who does not stutter (Iverach et al., 2009).

The public has damaged views of people who stutter (Van Borsel et al., 2011). Stuttering may be an obstacle to achieving occupational and academic success, especially if the stuttering is severe enough that it continually prevents the normal flow of communication (Yaruss, 2001). Acquiring positive attitudes toward people who stutter may help others to look beyond disfluent speech. When stuttering is understood in the context in which it occurs, it might not be misconstrued as someone being insecure,

nervous, nonassertive, withdrawn, or afraid. If stuttering is not looked on as a character flaw or shortcoming, the negative effect in the public eye could be reduced, which could positively affect the quality of life of people who stutter (Beilby et al., 2012).

The occupational domain. The administration of positive psychology in occupational settings might lift the stigma associated with stuttering. Stereotypes may be one reason potential employers believe people who stutter are suited only for certain jobs, because of their inability to communicate effectively (Gabel, Blood, Tellis, & Althouse, 2004). This stereotype might prevent people who stutter from being hired for a desired position as well as being overlooked even when they are qualified to work in that employment setting (Gabel et al., 2004).

Currently, employers are less apt to hire people who stutter, less likely to promote them within the organization, and may even discriminate against them by finding a way to demote or fire them (Logan & O'Connor, 2012; Perry, 2009). An employer might identify someone as a "stutterer" instead of focusing on his or her positive attributes (Klein & Hood, 2004). Likewise, an employer might feel that its overall perception toward people who stutter will carry over to the general public and will affect the reputation of the organization (McAllister et al., 2012).

The academic domain. Another aspect of living that may cause problems for people who stutter is in the academic domain. The role for positive psychology in education may dispel negative views toward students who stutter because of an inability to communicate fluently. Having negative school experiences as a child or adolescent may prevent someone from pursuing higher education (O'Brian et al., 2011). Positive

coping strategies might prevent unwanted thoughts and feelings in a person that prevent him or her from engaging in normal classroom-based activities because of the bad reactions that occur from peers (O'Brian et al., 2011). A positive effect as opposed to a negative effect such as this may allow a person to take part in other kinds of activities, such as sports, school fundraising events, group classroom activities, public-speaking events, class trips, and socialization with friends outside of school (O'Brian et al., 2011).

Educators who lack knowledge of and support toward people who stutter may inadvertently cause someone to have negative school experiences. A teacher might not be inclined to call on a student to read out loud in class because of his or her stuttering (Daniels, Gabel, & Hughes, 2012). A teacher might not pick a person who stutters for a class project because the teacher associates stuttering with having poor academic performance (Daniels et al., 2012). Educators who do not understand the associated effect that social problems have on people who stutter might not be aware that a person's inability to carry out a task could be a result of something else other rather than a person's stuttering (e.g., anxiety, fear; Daniels, Gabel, & Hughes, 2012).

Unfortunately for the person who stutters, an emphasis is often placed on the negative attributes of a person attempting to speak fluently (e.g., head nods, eye blinking, clearing the throat, or taking a deep breath) instead of listeners directing their attention to the entire person and the importance of the message he or she is trying to convey (Daniels, et al., 2012). Speech–language pathologists in the school system should be aware of these mechanisms of action at play and should convey these mechanisms to other faculty members to avoid making common errors with people who stutter (Daniels

et al., 2012). Classroom staff should encourage people who stutter to take part in all school-based learning and activities, teaching them to ask for help from fellow students, helping them to ignore the negative feedback from other students, and giving them constant reassurance and positive feedback (Daniels et al., 2012).

The financial domain. The financial hardships associated with stuttering exist throughout the life span (Bloodstein et al., 2008). Some people who stutter are placed in positions that may require them to maintain a high level of fluency (Bloodstein et al., 2008). Therefore, they must invest in their future by maintaining fluency (Bloodstein et al., 2008). People who stutter may have to spend additional money on private speech therapy to ensure job security (Bloodstein et al., 2008). In addition, because of the negative public opinion associated with stuttering, people who stutter might have to take a low-paying job that they might be overqualified for to meet their financial needs (Hurst & Cooper, 1983; Klein & Hood, 2004). People who stutter may avoid applying for a higher-paying job because of fear they may not be offered a better job (which may be an avoidance measure for people who stutter; Hurst & Cooper, 1983; Klein & Hood, 2004). Taking a lower-paying job is a common maneuver for people who stutter (Hurst & Cooper, 1983; Klein & Hood, 2004). Many fluency therapists use an approach-oriented coping intervention technique to help stutters gain the confidence they need to apply for jobs (McAllister et al., 2012; Plexico et al., 2009).

### **Rationale for Choice of Theory**

This research used positive psychology by investigating in four domains the positive coping strategies of adult women who stutter. The goal was to gain an

understanding about the negative views of society and to challenge harmful beliefs about people who stutter. This study of positive psychology and coping strategies women who stutter use describes how they successfully manage their world socially, occupationally, academically, and financially (Leontiev, 2013).

# How the Theory of Positive Psychology Relates to the Current Study

I designed this research to investigate the subjective experiences of adult women who stutter as well as to determine the positive coping strategies implemented through the application of positive psychology. Exploring and documenting the positive coping strategies of people who stutter can enlighten others about these peoples' strengths and thereby decrease the stress of negative public attitudes toward stuttering (St. Louis, 2012; Von Tiling, 2011; Yaruss, 2010). Public attitudes reflect a lack of understanding and knowledge toward people who stutter that are derived from erroneous beliefs (Betz, Blood, & Blood, 2008; Daniels et al., 2012). These kinds of negative attitudes are not limited to the views of the general public but also exist among professionals, such as educators and speech–language pathologists (Betz, Blood, & Blood, 2008; Daniels et al., 2012).

Listeners report that people who stutter are received in a negative fashion (Tran, Blumgart, & Craig, 2011). Erroneous conclusions are drawn about poor speech performance in terms of intelligence or emotional stability (Hughes, Gabel, Irani, & Schlagheck, 2010). The broader picture of stuttering represents how it affects a person's overall level of functioning and the negative effect it has on different aspects of the speaker's life (Koedoot, Frankins, Bouwmans, & Stolk, 2011; Yaruss & Quesal, 2006;

Craig, Blumgart, & Tran, 2009). Using the information that currently exists in the literature provided the basis for the absence of positive psychology.

# **Applied Research Questions for Positive Psychology**

The research questions for this study reflected the results of past studies conducted regarding the lived experiences of people who stutter. I designed the research questions to cover potential stressors, challenges, and positive coping strategies that adult women who stutter face in four specific life domains. The theory of positive psychology was pertinent to the current study, because it helped to assess the stress that women who stutter endure and the positive coping strategies they use to negate negative opinions toward people who stutter (Abdalla & St. Louis, 2012; Blumgart et al., 2012).

No study of this nature has been conducted on the lived experiences of women who stutter. Therefore, this study was the first of its kind to investigate the personal reports gathered from women who stutter in four domains of their lives (social, occupational, academic, financial). The information generated provides the impetus for more studies to be conducted on women who stutter over a lifetime. The following research questions were addressed:

- 1. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *social interactions*, and what positive coping strategies have they used?
- 2. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *occupations*, and what positive coping strategies have they used?

- 3. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *formal education*, and what positive coping strategies have they used?
- 4. What are the perceptions and experiences of adult women who stutter regarding the stressors on their *financial matters*, and what positive coping strategies have they used?

### **Major Themes in the Literature**

The stuttering literature focuses on its etiology and treatment. The purpose of my study was to investigate the quality of life of women who stutter. Yaruss and Quesal (2004) described stuttering in terms of the WHO's (1980) *International Classification of Impairments, Disabilities, and Handicaps* (ICIDH). The purpose of their study was to present the full scope of problems that people who stutter encounter in their environment as well as personally. The *International Classification of Functioning, Disability, and Health* (ICF; WHO, 2001) addressed the effects for people who stutter in areas such as activities and participation, personal factors, body function, and environmental factors, as well as listing the presumed etiology for stuttering. This model formed the basis for understanding stuttering in the context of which it occurs, as well as building on other kinds of research about people who stutter (WHO, 2001).

I focused on the social, occupational, academic, and financial domains. Central themes in the literature related to this study included research on an individual's ability to work in terms of performance and promotions, as well as relationships with their supervisors and their staff (Emmons, 2009; Logan & O'Connor, 2012). The effect of

stuttering on social relationships was significant to this study. Stuttering affects a person's ability to have a romantic relationship with a spouse or partner, as well as the ability to relate to peers or family members (St. Louis, 2005; St. Louis, Reichel; Yaruss; & Lubker, 2009). People who stutter are considered to be less attractive because of the negative stereotype associated with stuttering, such as being nervous, anxious, tense, insecure, shy, introverted, withdrawn, quiet, nonassertive, and afraid (St. Louis, 2005; St. Louis, Reichel; Yaruss; & Lubker, 2009). Opinions regarding stuttering may negatively influence a person's decision to enter into a relationship with someone who stutters (St. Louis, 2005; St. Louis, Reichel; Yaruss; & Lubker, 2009)

The financial hardships and academic disadvantages can be viewed as mutual themes in the research because of the way they interact. Stuttering affects a person in all aspects of daily living and diminishes quality of life (Yaruss & Quesal, 2006). Negative consequences caused by stuttering lead to low self-esteem, embarrassment, frustration, or even anxiety in people who stutter (McAllister et al., 2012). The negative stereotypes and stigmas associated with stuttering permeate a person's quality of life occupationally causing them to take a low-paying job, decreasing their chance of being hired, causing them to be passed over for a job promotion, or diminishing job performance (Klein & Hood, 2004). In an educational setting, a person who stutters may (a) be deemed as not capable enough by educators which restricts classroom learning, (b) not apply for college because of negative school experiences, and (c) limit job interviews and career choices (Gabel et al., 2004; Klompas & Ross, 2004).

# What Is Known and What Is Not Known in the Literature Regarding Stuttering

The exact cause of language disorders, articulation disorders, reading disorders, phonological disorders, and any problems of this nature remains unknown (Maguire et al., 2012; Yairi & Ambrose, 2103). Not knowing the exact etiology makes these disturbances difficult to treat. Stuttering affects 1% of adults (Maguire et al., 2012). The male-to-female ratio for adults who stutter of 5:1 (Yairi & Ambrose, 2103).

### Gap in the Literature

Thus far, few studies have been exclusively conducted on women who stutter; this could be due to the prevalence of the disorder in men. This study filled a gap in the literature of studies conducted on women who stutter.

# **Diagnosis of Stuttering**

The American Psychiatric Association (2013) defined *stuttering* as a disturbance in the normal fluency and time patterning of speech (inappropriate for the individual's age), characterized by frequent occurrences of one or more of the following: sound and syllable repetitions, sound prolongations, interjections, broken words (e.g., pauses within a word), audible or silent blocking, circumlocutions (e.g., word substitutions to avoid problematic words), words produced with physical tension, monosyllabic whole-word repetitions). Stuttering is also defined as a disturbance in the normal fluency and time patterning of speech characterized by frequent repetitions or prolongations of sound, syllables, or words with hesitations, and pauses that disrupt speech, particularly in situations where communication is important or stressful (APA, 2013).

## **Etiology of Stuttering**

Stuttering has numerous mechanisms of action that interplay with one another, including muscle control, emotions, anxieties, cognitive avoidance, and social interaction (Maguire et al., 2012). Researchers have debated the incidence and development of stuttering because of the multifaceted nature of this disfluency disorder. Some researchers indicate that stuttering may be an inherited metabolic disorder and may have a neurophysiological component (Kang et al., 2010; Yairi & Ambrose, 2013). Recent advances will hopefully sanction comprehensive care for people who stutter, using speech therapy to maintain fluency as well as using evidence-based practices such as cognitive therapy (American Psychological Association, 2006; Menzies et al., 2009).

Variables associated with stuttering include cognitive, emotional, and biological problems, indicating the etiology of stuttering is multidimensional in nature (Yaruss & Quesal, 2006). Some cognitive variables related to stuttering include cognitive impairment, consisting of differences in motor dynamics (Yaruss & Quesal, 2006). These differences may be due to speech motor systems that have not followed a normal curve in terms of neural systems operating differently in people who stutter (Smith, Sadagopan, Walsh, & Weber-Fox, 2010). Environmental factors may be related to fear or anxiety associated with the performance of speech (Yairi & Ambrose, 2013). Chang et al. (2009) proposed that stuttering is associated with anxiety, which could affect the fluency in the speech patterns of people who stutter.

Stuttering may be biologically determined, as evidenced by anatomical differences in people who stutter (Chang, Synnestvedt, Ostuni, & Ludlow, 2009). A

genetic predisposition is possible (Chang et al., 2009). Researchers have described stuttering as a medical condition that can be detected by brain scans and genetic research (De Nil, Kroll, Lafaille, & Houle, 2003). De Nil et al. (2003) used positron emission tomography to investigate the relationship between stuttering and a range of variables that focused on anxiety, temperament, neuromuscular activity, heredity, and brain lesions. In addition, researchers have explored the potential correlation between prolactin and calcium levels in people who stutter (Chang et al., 2009) Similarly, other researchers have investigated the right and left hemispheres for visuospatial processing and linguistic functioning (Brocklehurst & Corely, 2011; De Nil et al., 2003; Devulapalli & Nasrallah, 2009; Mulcahy, Hennessey, Beilby, & Byrnes, 2008).

Bosshardt (2006) compared functional magnetic resonance imaging (fMRI) scans of people who stutter with people who do not stutter. Bosshardt found that neural systems activate differently during the generation and production of speech. People who stuttered required greater ongoing attention to processing and reduced the amount of "conceptual work" to limit their stuttering. Because studies of brain scans in children who stutter have not been conducted, the link between cognitive function and childhood stuttering has not been determined (McQuiston & Kloczko, 2011; Yairi & Ambrose, 2013). The results of functional and diffusing imaging of brain activity showed that adults who stutter have overactivity in the insula, cerebellum, and midbrain compared with underactivity in the ventral premotor system (Watkins et al., 2008). These findings support the theory that disruption in the cortical and subcortical neural systems causes disfluent speech in people who stutter (Watkins et al., 2008).

Researchers have examined the structure of the brain function to follow the hypothesis that individuals who stutter have structural abnormalities in the motor and language centers of the brain (Watkins et al., 2008; Change et al., 2009). Watkins et al. (2008) found structural white matter differences in people who stutter. The white matter integrity was compromised (reduced) in the premotor cortex—a crucial component for sensory integration processes during the production of speech (Watkins et al., 2008). Evidence also supports basal ganglia dysfunction, altered dopamine levels, and cortical abnormalities in developmental stuttering (Watkins et al., 2008). The basal ganglia function in selected movements that go to the premotor system, which might cause repetition of words or phrases in speech (Chang et al., 2009). These data suggest that a causative factor could account for this speech disfluency in the linguistic functioning of people who stutter (Chang et al., 2009).

Other researchers have emphasized psychopharmacologic management for stuttering by studying dopaminergic and serotonergic mechanisms of action in the brain (Maguire et al., 2012). This type of research studied using medication management to treat the condition of stuttering as opposed to traditional stuttering speech therapy programs (Maguire et al., 2012). Efforts continue to be made toward investigating whether some psychotropic medications may have beneficial effects when used off label. In response, the scientific community is advancing research to find a treatment that will manage the condition of stuttering by focusing on certain neurotransmitters in the brain that disrupt the fluency in the speech of people who stutter (Devulapalli & Nasrallah, 2009).

The results of other studies have indicated that people who stutter are not cognitively impaired and, for the most part, are medically healthy individuals (Watkins et al., 2008). However, despite the continued research being conducted regarding the origin of stuttering, more research is needed to understand how this speech disfluency affects individuals in the aspects of daily living (Maguire et al., 2012).

#### **Sex Differences**

The sex differences have not changed in the literature in terms of the male-to-female ratio, which is 5:1 in adults who stutter (Yairi & Ambrose, 2013). Stuttering continues to be more prevalent in men than women, and no changes have been reported. The higher ratio in the literature may be due to women recovering from stuttering more readily than men or underlying genetic links in terms of more men than women stuttering in families (Cox et al, 2005). Women are an understudied area, and more research is needed to understand how experiences differ between women and men and how these differences might play out in clinical services. Studies that have been conducted on men and women have a male bias that matches the population distribution differences (Yairi, Ambrose, & Cox, 1996).

#### The Four Domains for Women Who Stutter

The purpose of this study was to identify and understand the variables associated with stuttering. I explored the life circumstances of women who stutter socially, occupationally, academically, and financially by investigating the effect stuttering has on women through their subjective lived experiences and the positive coping strategies they have used in four domains: social, occupational, academic, and financial.

#### **Social Domain**

Social problems occur for people who stutter because of an inability to communicate with others (Yaruss & Quesal, 2006). An inability to speak fluently impedes many aspects of daily living and interferes with a person's quality of life (Yaruss & Quesal, 2006). This section addresses the problems that people who stutter encounter in day-to-day social interactions.

**Personal experiences of people who stutter.** Yaruss and Quesal (2006) developed the Overall Assessment of the Speaker's Experience of Stuttering—Adult Version (OASES-A) to aid with treatment planning and evaluations in clinical settings, to help clinicians understand the diverse nature of speakers' experiences and the overall impacts of stuttering on their lives, and to assist with research across different types of treatment methods. The instrument was designed to examine the personal experiences of adults who stutter and was based on the ICF (WHO, 2001) and the ICIDH (WHO, 1980) to ensure that the resulting instrument would provide a thorough understanding of speakers' personal experiences (Yaruss & Quesal, 2006). Yaruss and Quesal took several steps to develop the original OASES: focus groups with adults who stutter and speechlanguage pathologists who specialize in the treatment of stuttering; presentation of a complete theoretical framework, the WHO's (2001) ICF, that gives a thorough account for stuttering experiences associated with stuttering that were acknowledged by the focus groups; and trial instruments that were field tested with the responses of 300 people who stutter. The male:female ratio was not reported in this study.

The OASES-A consists of 100 items, each on a 5-point scale, divided into four sections; general information; reactions to stuttering; communication disorder severity; and quality of life (Blumgart, Tran, Yaruss, & Craig, 2012). The OASES-A represents the components of the ICF (Yaruss & Quesal, 2006). The first three categories of the OASES-A are as follows: 30 questions regarding the speaker's reactions to stuttering for *affective, behavioral,* and *cognitive* reactions to stuttering (representing *personal contextual factors* in the ICF); 25 functional communication questions that assess the speaker's *communication difficulty* at work, at home, and in social settings (representing *activity limitations* in different *environmental contexts* in the ICF); and 25 items assessing the impact of stuttering on the speaker's overall quality of life (representing *participation restriction* in the ICF; Blumgart, Tran, Yaruss, & Craig, 2012). The OASES-A results in an impact score and impact rating (e.g., mild, moderate, severe) indicating the overall negative impact of stuttering on the speaker's life (Yaruss & Quesal, 2006).

Blumgart, Tran, and Craig (2010b) investigated the prevalence of social phobia in adults who stutter. Blumgart et al. asserted that social anxiety or social phobia is a disorder in which a person experiences extreme and intense fear of being scrutinized by others. The sample size for study participants was 200 men and women who stuttered and 200 men and women who did not stutter (Blumgart et al., 2010b). The adult participants who did not stutter came from diverse settings (Blumgart et al., 2010b). The majority of the participants who stuttered had sought treatment for their stuttering at some point in their lives (94%); the remainder of the stuttering participants (6%) did not seek treatment for different reasons (Blumgart et al., 2010b).

Three-minute recorded speech samples were taken from the adults who stuttered during a 2- to 3-hour interview to determine the severity of their stuttering (Blumgart et al., 2010b). The control group was given the same interview protocol, with the exception of the speech sample, as well as pertinent stuttering information (Blumgart et al., 2010b). The assessment method included a behavioral measure of stuttering that calculated stuttering severity by the percentage of syllables stuttered (Blumgart et al., 2010b). The severity of the participants who stuttered was evaluated by a clinician, and interrater reliability was demonstrated by a researcher who reevaluated the speech samples (Blumgart et al., 2010b).

The participants in the Blumgart et al. (2010b) study also completed the Spielberger State-Trait Anxiety Inventory for the assessment of fears, which included questions on the fear of negative evaluation (Spielberger, 2010). The fear of negative evaluation is considered to be a valid and reliable measure used in early anxiety studies (Heimburg, Hope, Rapee, & Bruch 1988). The statistical methods for this study calculated mean values for anxiety measures and differences between the two groups of adults who stuttered and adults who did not stutter by using multivariate analyses of variance (Blumgart et al., 2010b). The association between anxiety measures and demographics was derived from Pearson correlation analysis (Blumgart et al., 2010b).

Blumgart et al. (2010b) reported that for the demographic information, the mean frequency for adults who stutter was in the low-to-moderate range (4% for stuttering severity). Blumgart et al. (2010b) found no differences in the men and women in stuttering severity for age. Moreover, their correlation analysis did not show any

differences for stuttering severity according to sex, birthplace, education, and employment. On the Lifestyle Appraisal Questionnaire (a standardized self-report health risk measure; Craig, Hancock, & Craig, 1996), no health risks were detected for the body mass index, diet, alcohol, or nicotine consumption were found across sex or group; however, health risks marked a significant risk with age in both groups (Blumgart et al., 2010b).

Descriptive statistics for anxiety indicated that adults who stutter are somewhat more anxious than adults who do not stutter across all anxiety measures (Blumgart et al., 2010b). Anxiety was reduced with age across all five of the anxiety measures in both groups (Blumgart et al., 2010b). Stuttering severity was not found to be significantly associated with high levels of anxiety (Blumgart et al., 2010b).

Fifty of the adults who stuttered had elevations for more specific phobia symptoms than in the control group. In addition, adults who stuttered were more likely to have significantly more anxiety-specific phobia than adults who did not stutter (Blumgart et al., 2010b). On the generalized anxiety disorder items, there were no significant differences between the groups (Blumgart et al., 2010b).

The intent of Blumgart et al.'s (2012) study was to determine the prevalence of social anxiety (social phobia) in adults who stutter and to detect any differences in social anxiety between adults who stutter and adults who do not stutter. The results of this study supported previous findings that stuttering was associated with abnormally elevated social anxiety (Blumgart et al., 2012). Blumgart et al. (2012) found that stuttering considerably influenced trait and social anxiety, and adults who stuttered had a higher

frequency of social phobia than the control participants did. Moreover, stuttering has been known to cause diminished quality of life in domains such as vitality, social/emotional functioning, and mental functioning (Blumgart et al., 2012).

Other people's opinions about people who stutter. An area that continues to be studied in the literature is the stereotypical view that people who do not stutter hold toward people who stutter. St. Louis, Lubker, Yaruss, Pill, and Diggs (2001) developed the Public Opinion Survey of Human Attributes (POSHA) as a universal questionnaire to evaluate public attitudes toward people who stutter. In 2012, St. Louis measured the stigma held by members of the general public regarding stuttering. A task force in Morgantown, West Virginia, was specifically convened to measure public opinions about stuttering (St. Louis, 2012). The task force turned into an international project [International Project on Attitudes Toward Human Attributes (IPATH)] that measured not only negative attitudes toward stuttering but also stigma held by the general public toward mental illness (St. Louis, 2012).

The St. Louis (2012) study consisted of a heterogeneous group of male and female participants who ranged in age from 31 to 50 years. A total of 324 respondents initially answered one of the versions of the POSHA-2 or POSHA-E2 (St. Louis, 2012). The other survey was not answered by the participants for 2 to 3 weeks (St. Louis, 2012). The versions of the POSHA differ in terms of the way attributes are structured in the categories of the questionnaire, as well as other kinds of changes made to illicit different responses from respondents. St. Louis compared the two versions of the POSHA several different ways to determine public stereotypes for stuttering. When the surveys were

completed, the results of the two POSHA versions were compared several ways using *t*-test comparisons, as well as test–retest reliability using Pearson product-moment correlation coefficients or percent agreements (St. Louis, 2012). This study was performed in four different countries, and the questionnaire was administered in four different languages.

Some examples of impressions that people who do not stutter have about stuttering might be that they think people who stutter are mentally ill, are less intelligent, have a brain function problem, or have been injured (St. Louis, 2012). Characteristics that they believe about people who stutter may include nervousness, shyness, or fearfulness (St. Louis, 2012). Further, they may consider a cause of stuttering to be from an external force such as a ghost, demon, or spirit (St. Louis, 2012). The reactions toward people who stutter by people who do not stutter indicated that people who stutter should conceal their stuttering or find someone else to speak for them and that people who do not stutter should be afraid of people who stutter or ignore their stuttering (St. Louis, 2012). In addition, people who do not stutter reported often being embarrassed, surprised, or frustrated with the person who stuttered (St. Louis, 2012). They reported often telling a person to stop stuttering, imitating their stuttering, or walking away from the person who is stuttering (St. Louis, 2012).

The results of the St. Louis (2012) study were based on respondent correlations and suggested that attitudes toward stuttering were greatly affected by shared societal values, individual views, and individually held beliefs in average group attitudes. St. Louis showed that individual points of view toward stuttering were significantly affected

by the common views taken in society. Moreover, personal beliefs about people who stutter have a great impact on group attitudes for this speech disorder (St. Louis, 2012).

Categories for public attitudes toward mental illness and obesity were added to the POSHA instrument, because stereotyping and stigma by members of the general public are not limited to stuttering (Boyle et al., 2009; Hughes et al., 2010). Results for the POSHA-Stuttering (POSHA-S) showed slightly more positive reactions from the public for people who stutter in terms of beliefs and self-reactions toward stuttering. In summary, the POSHA-S is important for this study and future research, because it is a set of questions specifically designed to gather public opinion about people who stutter. It can be used to compare public attitudes toward stuttering, as well as to develop ways to shift attitudes toward people who stutter. The POSHA-S database can be used to compare public attitudes toward people who stutter all over the world. The data gathered can continue to aid in improving the perceptions and beliefs about people who stutter for future research and treatment strategies. The sampling of adults for the St. Louis (2012) study did not indicate any male-to-female sex ratio differences.

The listener's perception of people who stutter is complicated because of the different aspects of stuttered speech that people who do not stutter consider (Hughes et al., 2010). For instance, the listener's perception of different modes of speaking by the speaker (stuttered speech or prolonged speech) and the different dimensions of perceptions in the speaker's personality attributes such as intelligence or self-confidence (Hughes et al., 2010). Von Tiling (2011) examined listener perceptions for speech patterns of people who stutter in a specific social situation by having 115 people who do

not stutter (51 men; 64 women) watch videos of three young men who stutter having a normal everyday conversation. The four different kinds of stuttering speech samples evaluated in Von Tiling's (2011) study were (a) repetitions, (b) prolongations, and (c) blocks, which are commonly referred to as core stuttering behaviors, as well as (d) hesitant speech such as verbal avoidance behaviors (interjections and revisions) and prolonged speech that is derived from fluency therapy.

Von Tiling (2011) stated that the perception of participants who listened to social voice-recorded conversation showed negative feelings toward an increase in the frequency of stuttering, as well as an increase in hesitant speech movements. Hesitant speech was perceived more negatively than stuttered hesitant speech (Von Tiling, 2011). Moreover, hesitant/stuttered speech was perceived more negatively than stuttered speech and prolonged speech (Von Tiling, 2011). The way people who stutter speak influenced perceived pleasantness, self-confidence, and communicative competence (Von Tiling, 2011). According to Von Tiling, the listener comments were negative in nature, and listeners viewed the three men in conversation as being anxious, hesitant, not confident, nervous, and uncertain. The listeners perceived avoidance behaviors as making the people who stutter appear to be less competent when they tried to hide their stuttering behaviors instead of using their stuttered speech or prolonged speech (Von Tiling, 2011).

Other results of Von Tiling's (2011) study indicated that manner of speaking had a negative effect on perceived intelligence but not on attractiveness. Post hoc testing showed an association between hesitant speech and perceived dull intelligence (Von Tiling, 2011). Other behavioral reactions showed that people who do not stutter tended to

finish the sentences for hesitant speakers more than people who stutter (Von Tiling, 2011). Raters described a participant's speech as emotionally incompetent, such as being anxious, hesitant, not confident, nervous, and uncertain (Von Tiling, 2011). Other listener responses indicated communicative incompetence because of speaking slowly, monotonously, or haltingly owing to a challenging time with talking (Von Tiling, 2011). Some positive comments were made from the listener responses, such as self-confident and composed (Von Tiling, 2011). Comments were made about the listener responses, such as impaired speech defect and having a chronic problem with finding the right words (Von Tiling, 2011). The listener perceptions for the different ways that people who stutter speak revealed that hesitant speech had the most negative views as well as hesitant/stuttered speech according to the listener responses (Von Tiling, 2011). Von Tiling reported negative responses when people who stutter overused interjections, revisions, incomplete phrases, and pauses, which are termed verbal avoidance behaviors. Listener responses reflected that verbal avoidance behaviors made people who stutter look incompetent (Von Tiling, 2011). The use of core behaviors and secondary behaviors engaged by the speakers led listeners to comment that they were too involved in hiding their disfluency rather than talking openly, honestly, and effectively (Von Tiling, 2011). Von Tiling linked stuttered speech and prolonged speech to positive evaluations in this study.

The unexpected findings of this study showed that hesitant speech was not associated with emotional competence but with communicative competence (Von Tiling, 2011). An expected finding of this study was that hesitant speakers were viewed

negatively in terms of intelligence and unfair responses (Von Tiling, 2011). Prolonged speech and stuttered speech were perceived more favorably in listener responses in terms of self-confidence, because listeners viewed these conditions as a chronic physical disability (Von Tiling, 2011). Von Tiling's (2011) study is important for three reasons: to help people who stutter develop an appreciation for the techniques they use to compensate for their stuttering are perceived by others, to develop future research about social anxiety and avoidance behaviors regarding community functioning, and to relate to the problems regarding people who stutter and to understand how stuttering affects them socially.

Medeiros de Britto Pereira, Perni Rossi, and Van Borsel (2008) piloted a study of public awareness and knowledge of stuttering. They measured the perceptions of people who do not stutter toward people who stutter, as well as the kind of knowledge people who do not stutter possessed about the communication disorder (Medeiros de Britto Pereira et al., 2008). Students in the speech–language pathology department from the University of Veiga de Almeida in Rio de Janeiro approached people in a public setting to ask questions about stuttering. A heterogeneous group of individuals selected for this study spanned age groups from 15 to 21 years, 21 to 55 years, and 55 years or older. A total of 606 participants were included in this study (309 women; 297 men).

Medeiros de Britto Pereira et al. (2008) found that more than half of the people surveyed (63.3%) had had an encounter with a person who stuttered or had heard of someone who had disfluency. Respondents believed that 5% of the population stuttered. However, people from higher levels of learning thought that the prevalence of stuttering

was less than 1% (Medeiros de Britto Pereira et al., 2008). There was no significance in this category between the different age groups (Medeiros de Britto Pereira et al., 2008). For the sex distribution in stuttering, Medeiros de Britto Pereira et al. found that 53.1% thought that there were more men than women who stuttered, 66% thought that stuttering was more common in girls than boys, and 40.3% did not think there was a difference between sexes (Medeiros de Britto Pereira et al., 2008).

The causes of stuttering were divided into seven categories: 56.75% connected stuttering to emotions, 11.1% thought it was a neurologic disorder, 8.9% attributed stuttering to genetic predisposition, 2.8% linked it to a speech defect, 1.8% thought it was associated with imitation, 1.3% leaned toward an organic etiology, and 17.2% assumed stuttering was caused by something else (Medeiros de Britto Pereira et al., 2008). For the male and female groups, the categories were found to have no significant differences (Medeiros de Britto Pereira et al., 2008).

In terms of treatment, 94% of the respondents in Medeiros de Britto Pereira et al.'s study (2008) thought that stuttering could be treated, especially in the youngest age group and among those who were in higher education. With regard to the intellectual abilities of people who stutter, 66.3% of people thought that there was not a difference between people who stutter and people who do not stutter, 23.8% of the participants believed that intelligence is higher in people who stutter, and 9.9% believed the converse to be true (Medeiros de Britto Pereira et al., 2008). There were differences of opinion among the sexes; men believed that people who stutter were smarter, whereas women tended to think that people who stutter were of equal intelligence (Medeiros de Britto

Pereira et al., 2008). Medeiros de Britto Pereira et al found that 30.7% of participants viewed stuttering as being hereditary with no differences between the educational level of people, age groups, and sexes. Moreover, 48% of the respondents thought that people who stuttered were disabled if they wore a hearing aid; 4% thought that people who stutter wearing glasses had a disability (Medeiros de Britto Pereira et al., 2008).

Medeiros de Britto Pereira et al. (2008) reported that 63.8% of their respondents stated that they would obtain assistance from a speech–language pathologist if they had a 4-year-old child who stuttered, 26.2% would defer to a family physician, 8.1% would fail to take any kind of action, and 1.8% would take another course of action. Even though two-thirds of the 606 people surveyed stated that they either knew of someone who stuttered or had met a person who stuttered, the participants still held erroneous beliefs about stuttering (Medeiros de Britto Pereira et al., 2008). An example of false beliefs would be the etiology of stuttering (Medeiros de Britto Pereira et al., 2008). The overall knowledge about stuttering is still limited among the public, but the study indicated that people in positions of higher education had fewer misconceptions about stuttering regarding the prevalence of the communication disorder, sex distribution, culture, and race. Medeiros de Britto Pereira et al. asserted that little research exists in the literature about public awareness and knowledge of stuttering.

### **Occupational Domain**

This section describes the life experiences that people who stutter may encounter during employment, as well as any other job-related involvements affecting quality of life.

Personal experiences of people who stutter. The Vocational Advice Scale (VAS), developed by Gabel et al. (2004), measures vocational role entrapment for people who stutter. The VAS is used to identify negative attitudes toward people who stutter to determine the kinds of obstacles they face in employment settings. The content of the scale was based on four research areas regarding stereotyping people who stutter:

(a) stigma, (b) spread phenomenon, (c) role entrapment, and (d) research of attitudes toward people who stutter working in certain careers (Gabel et al., 2004).

Stigma refers to someone who has a spoiled identity caused by the perceptions others have of a single characteristic that is viewed as odd (Gabel et al., 2004). Concomitantly, spread phenomenon means that people who stutter are viewed as being damaged because of their speech disfluency, as well as others having an opinion that they are disabled intellectually and personally and lack competence (Gabel et al., 2004). Role entrapment is defined as negative labeling for a person who has a disability in terms of not being able to perform a specific job duty effectively. Gabel et al. (2004) asserted that the most damaging effects of the spread of stereotypes and stigma result in role entrapment.

Klein and Hood (2004) studied 165 adult men and 64 adult women who stutter. The participants filled out a 17-item survey to assess the effect that stuttering has on employment and job promotion from their personal experiences. The results revealed that more than 69% of people who stuttered believed that stuttering interfered with their chance of being hired for a new job or being promoted from their current position (Klein & Hood, 2004). More than half of the participants agreed that stuttering interfered with

their job performance, and 80% of the participants agreed that when applying for a job, a person who does not stutter would be viewed more positively than someone who stutters (Klein & Hood, 2004). Only 8% of the participants disagreed that they would be discriminated against for the same job position over a person who does not stutter (Klein & Hood, 2004). Klein and Hood found that stuttering interferes with a person's chance of being hired for a new job or being promoted. Similarly, people who stutter deny themselves a chance to begin a new job as well as turn down propositions for job advancement (Klein & Hood, 2004).

Prejudice exists in the workplace toward disfluent people (Gabel et al., 2004).

This prejudice can inadvertently cause people who stutter to have a negative attitude toward themselves (Gabel et al., 2004). Furthermore, these kinds of negative experiences hinder equal employment opportunities for people who stutter (Gabel et al., 2004).

People who stutter's chances of being employed are reduced because of what others think about their speech disorder, as well as how they feel about themselves (Gabel et al., 2004)

Klein and Hood (2004) did not indicate whether men or women felt more affected by stuttering in terms of work performance. Another important aspect of their study was that job discrimination and role entrapment for people who stutter existed among employers (Klein & Hood, 2004). Fluent people believed that people who stutter should be placed in jobs that demand lower-level communication abilities (e.g., computer programmer, statistician, publication editor, accountant, and engineer; Klein & Hood, 2004). Zhang, Saltuklaroglu, Hough, and Kalinowski (2008) and Klein and Hood (2004)

suggested that people who stutter have less chance for being employed or promoted and fewer job choices.

McAllister et al. (2012) investigated the employment and educational outcomes for people who stutter. Information was collected from the National Child Development Study (NCDS), a birth cohort study that began in 1958 (Power & Elliott, 2006).

McAllister et al. used NCDS as a resource. NCDS consisted of 18,558 child participants who were evaluated when they were born as well as at the ages of 7, 11, 16, 23, 33, 42, and 50 (Power & Elliott, 2006). The survey structured questions that would reflect speech development in children and inquired about stuttering at the ages of 7 and 11 (McAllister et al., 2012). McAllister et al. considered different kinds of elements about a child's life, such as socioeconomic status, education of parents, family income, child's behavior, and executive functioning. These variables were examined to determine whether they affected the communication disorder of stuttering (McAllister et al., 2012).

McAllister et al. (2012) wanted to identify a relationship between stuttering and educational/employment problems. In terms of employment, they posited that people who stutter have a decreased chance of being promoted in their job, reject offers for promotion because of their stuttering, and suffer impaired job performance (McAllister et al., 2012). People who stutter believe that stuttering negatively impacts employment and education. At age 16, 217 group members (174 men; 43 women) were reported by their parents to stutter (McAllister et al., 2012). Their findings for the domain of employment showed that there was not enough evidence to support that adolescent stuttering has a negative effect later as an adult (McAllister et al., 2012). McAllister et al. reported that a reason

the study could not validate its finding might be due to the methodology used in the research, because stuttering was not diagnosed by a speech–language pathologist but rather by the parents of the child who stutters. The male-to-female ratio stated in the McAllister et al. sample was similar to those indicated in other studies (e.g., Craig, Hancock, Tran, Craig, & Peters, 2002). McAllister et al. noted similarities to other studies in the characteristics for people who stutter, such as being primarily male, having been bullied, and having inferior cognitive functioning.

Other people's opinions about people who stutter. It is important to acknowledge how people who stutter are perceived for vocational choices. Research indicates that negative stereotyping of people who stutter limits their career opportunities.

How people who stutter are affected by stereotypes and negative opinions can spread and lead to role entrapment, vocational stereotyping, and limited job choices (Gabel et al., 2004). Gabel et al. (2004) researched attitudes that people who do not stutter have toward people who stutter working in certain careers (Gabel et al., 2004). *Stigma* and *spread phenomenon* are terms used synonymously with *role entrapment* (Gabel et al., 2004). Therefore, the overall negative perceptions of people who stutter might lead to social, academic, and vocational discrimination and prejudice because of their individual differences (Gabel et al., 2004). Gabel et al. investigated whether people who stutter were the subject of vocational stereotyping.

Five hundred student participants who did not stutter were mailed packets from three universities and asked to fill out the VAS to advise people who stutter on the kind of employment setting that would best suit their speech disfluency (Gabel et al., 2004).

The participants were 110 men and 275 women ages 19 to 58 years (Gabel et al., 2004). The survey included a broad range of 43 individual career choices (Gabel et al., 2004). Gabel et al. (2004) reported that the survey responses indicated that both sexes had positive and negative attitudes toward people who stutter. The questionnaire responses specified that vocational role entrapment does exist in the form of vocational stereotyping for people who stutter (Gabel et al., 2004). Consequently, people who stutter were advised not to follow 20 of the 43 careers (for employment) listed on the VAS by the students who did not stutter who filled out the survey (Gabel et al., 2004). Gabel et al. speculated that the 20 careers not listed as being advisable might be due to these vocational choices requiring a person to have high-level verbal skills.

Emmons (2009) conducted a quantitative study of the perceptions of people who stutter in employment. The researcher used audiotaped speech samples of nonfluent and fluent participants to determine who would be good candidates for high-level jobs (Emmons, 2009). Male voice recordings were evaluated by a heterogeneous group of 204 student participants who were enrolled in introductory psychology classes at a small college (Emmons, 2009). The male-to-female ratio of student participants was smaller in this study, because there were fewer male than female participants enrolled on the college campus site (Emmons, 2009).

Emmons (2009) measured the participants' attitudes toward people who stuttered according to the raters' self-perceptions by answering questions that described the voice recordings of fluent and nonfluent speakers. The 25-item Semantic Differential Scale (Woods & Williams, 1976) was used in this study. This scale has been validated and used

extensively in stuttering research. The Semantic Differential Scale contains words potentially describing men who stutter and their antonym counterparts, such as *tense–relaxed, aggressive–passive,* and *intelligent–dull* (Woods & Williams, 1976). The scale measured intervals that ranged from *very much* to *neutral* (Woods & Williams, 1976).

Emmons (2009) reported that the voice recordings of the people who stutter were perceived in a negative fashion, which made them the least likely choice for a presidential nominee or a chief executive officer of a company. If someone who stutters was being interviewed for a high-status job, he or she would receive negative feedback and be less likely to be picked for the job (Emmons, 2009). The results also showed that the chance of obtaining higher level employment was reduced because of stuttering severity (Emmons, 2009). Furthermore, people who stutter viewed their stuttering to be a major handicap in pursuit of their true vocations (Guitar, 2009). Emmons (2009) also found that more than 70% of people who stutter believed that stuttering not only interfered with there being hired or promoted but also hindered their past job performance.

Zhang et al. (2008) investigated the effect that stuttering has on people who stutter. Ninety-one university students were asked to take on the mindset of a person who stutters by answering 56 questions (Zhang et al., 2008). The survey consisted of two forms of a questionnaire scale: a stutter scale and a fluent scale (Zhang et al., 2008). The stutter scale group had 44 respondents (2 men, 42 women); the Fluent Scale group had 47 respondents (2 men, 45 women; Zhang et al., 2008). The questionnaire listed the following life situations categories: vocation, romance, daily life activity, friends, social

life, family, and general lifestyle (Zhang et al., 2008). The stutter scale identified how people viewed themselves in certain situations (Zhang et al., 2008). A Likert scale from 1 to 7 was used to rate how stuttering affected the lives of the participants in both groups (Zhang et al., 2008).

The results were significant for all of the areas of life mentioned for negatively affecting the quality of life for someone who stutters (Zhang et al., 2008). Zhang et al. (2008) found in the area of employment people who stutter were viewed as being underprivileged compared with people who do not stutter because of the need for a high level of communication in jobs that serve the public (e.g., attorney, police). The domain of employment demonstrated results similar to a previous study conducted by Klein and Hood (2004) regarding the negative effect that stuttering has on a person who wishes to become gainfully employed. Klein and Hood found that the areas affected by stuttering were a person's job performance and employability.

#### Academic Domain

In the world of academia, misconceptions exist about the causes of stuttering (Boyle et al., 2009). These misconceptions lead to stigmatization and discrimination of people who stutter (Craig, Tran & Craig, 2003). Stuttering evokes responses in people who do not stutter to have less personal contact and to ensure more social distance from people who stutter (Boyle et al., 2009). Likewise, evidence suggests that negative beliefs and negative judgments made about people who stutter may begin during early years and adolescence resulting in guilt, shame, and self-consciousness from being stigmatized (Blood & Blood, 2004; Gabel et al., 2004; Hearne, Packman, Onslow, & Quine, 2008).

Personal experiences of people who stutter. O'Brian et al. (2011) conducted a study with 147 adult participants (116 men; 31 women) to investigate stuttering severity and educational attainment. They reported that 121 of the 147 participants had been treated for their stuttering at some point in time (O'Brian et al., 2011). The participants were instructed to rate the severity of their stuttering on a self-report stuttering severity index during an assessment with a speech—language pathologist (O'Brian et al., 2011). Using a 9-point scale, participants rated their stuttering from typical life situations to a worst-case scenario in eight different speaking conditions (O'Brian et al., 2011). O'Brian et al. (2011) used the Statistical Analysis System (SAS) version 9.2 for the data analysis. Speaking situations were as follows: talking with a family member; talking with a familiar person, not a family member; talking in a group of people; talking with a stranger; talking with an authority figure such as a work manager or teacher; talking on the telephone; ordering food or drink; and giving their name and address (O'Brian et al., 2011).

Negative experiences during the school years might influence whether people who stutter continued with higher education and might forecast academic achievement.

O'Brian et al. (2011) concluded that stuttering interferes with a person's ability to learn in a traditional classroom setting as well as to continue with education on a college level. People who stutter have negative social experience in the formative years that might lead to problems in academia, because verbal ability is needed to be successful in school (O'Brian et al., 2011). A person who stutters might not have good social skills, such as speaking out loud in class, discussing classroom tasks with their fellow classmates, public

speaking, or asking and answering question when class is in session (O'Brian et al., 2011). O'Brian et al. (2011) showed how negative school experiences prevented people who stutter from attaining their educational goals and affected them as adults. Their study found that in the formative years of development, it is probable that a person who stutters endures being bullied, teased, and social isolated; has low self-confidence; and achieves lower academic standing (O'Brian et al., 2011).

According to O'Brian et al. (2011), stuttering interferes with the process of normal communication, inadvertently causing social maladjustment. This maladjustment can lead to educational and occupational problems in life on a short- or long-term basis (O'Brian et al., 2011). The inability to talk fluently interferes with everyday life interaction (O'Brian et al., 2011). Likewise, not being able to verbally communicate one's thoughts and feelings with others is often associated with social maladjustment and underachievement (O'Brian et al., 2011). Accordingly, stuttering interferes with social, academic and occupational processes, which impairs a person's overall quality of life.

Active verbal participation is a critical component for classroom learning, because it sets the pace for developing social skills in and out of a classroom setting (Daniels et al., 2012). This kind of skill-building teaches children how to interact with others (Daniels et al., 2012). When a person is not fluent, it is difficult for him or her to take part in basic school curriculum requirements such as reading out loud, discussing activities with classmates, asking questions, or speaking in front a group of peers (Daniels et al., 2012). These kinds of demands cause someone who is disfluent to experience undue stress and anxiety, which places a strain on people who stutter (Daniels et al., 2012).

Consequently, in an attempt to speak fluently, people who stutter experience peculiar body movements made in an attempt to speak (Daniels et al., 2012).

Daniels et al. (2012) conducted a phenomenological study to investigate the lived experiences of 11 adult participants (8 men; 3 women) who stuttered during their preschool, childhood, and adolescent years. They conducted semistructured interviews with all 11 participants (8 men; 3 women), a first focus group interview with 6 participants (2 men; 4 women), and a second focus group interview with 4 participants (3 men; 1 woman; Daniels et al., 2012). The semistructured interview participants were obtained from the National Stuttering Association in the areas of Houston and Dallas and by individual contacts made in northwest Ohio and southeast Michigan (Daniels et al., 2012).

Daniels et al. (2012) made audio and video recordings of the focus groups and interviews to analyze the data for any common themes among the participants' narratives regarding their academic experience as people who stutter. They derived a code list from similar life scripts pertinent to participants' school experiences (Daniels et al., 2012). In addition, they summarized the codes and documented the relevant school experiences of adults who stutter (Daniels et al., 2012). Daniels et al. documented observations and information acquired from formal and informal field notes, including documenting the participants' behavior such as body language and emotional reactions and the personal reactions of the interviewer. Their analysis of the data discovered four central themes with subthemes: (a) student characteristics, (b) school characteristics, (c) posteducational consequences, and (d) personal reflections and observations (Daniels et al., 2012).

Daniels et al. (2012) covered salient features about the good and bad experiences of people who stutter from kindergarten through 12th grade. They observed that traumatic memories may stand out more than good experiences (Daniels et al., 2012). The results of Daniels et al.'s research reflect previous findings by Klompas and Ross (2004), which asserted that people who stutter have negative feelings and experiences that stem from other students, as well as teachers. When educators and speech pathologists possess knowledge about stuttering and are realistic about classroom expectations, they can understand the nature of stuttering and the impact it has on a student who stutters (Daniels et al., 2012).

Student characteristics. Student characteristics reflect the way that stuttering affects students during school. The subthemes Daniels et al. (2012) identified under student characteristics were coping strategies, physiological consequences, and psychological consequences of stuttering.

The participants' coping strategies of avoiding stuttering induced many physiological characteristics. Eighteen participants commented on experiencing tense speech blocks, sweaty palms, rapid heartbeats, and flushed faces of embarrassment when engaging in verbal classroom assignments. These individuals also expressed negative emotions, anxiety, and went to great lengths to avoid stuttering. This theme referred to characteristics of the school environment, such as relationships and social interactions that take place within school, and the knowledge, routines, and common practices of school. Sub-

themes included classroom participation, relationships with teachers and peers, academics and learning, and speech therapy. (Daniels et al., 2012, p. 72)

The first subtheme from the Daniels et al. (2012) study was coping strategies, which defines the way in which students who stutter cope in school, such as physical (tapping behaviors when talking and speech modification techniques), linguistic (manipulation discourse and language to enhance fluency using word substitutions or changing or skipping words when reading out loud, or not using a few words to speak), and social interaction (manipulating social routines and participation with others to increase fluency; Daniels et al., 2012). An example used in this study to further define manipulation is when a person who stutters saying "I don't know," when in fact he or she knows the answer to the question being asked or using nonverbal cues for class participation as well as writing answers instead of answering questions out loud.

The second subtheme Daniels et al. (2012) identified was physiological consequences, which refers to an increase in physiological tension that causes physical anxiety during school. Daniels et al. determined that anxiety affected students' performance in class and outside of a school setting.

The third subtheme Daniels et al. (2012) identified was psychological consequence, which referred to the self-attitude of people who stutter and how they perceive themselves as hopeless in situations. This may be because of their teachers and or peers in a school setting or engaging in mind games when reflecting on the idea of speaking (Daniels et al., 2012).

School characteristics. Daniels et al. (2012) stated that school characteristics include relationships; social interactions in school; and knowledge, routines, and common practices of school. Subthemes under school characteristics are classroom participation, relationships with teachers and peers, academic, and learning environment, and speech therapy (Daniels et al., 2012). In Daniel et al.'s study, classroom participation was defined by how stuttering obstructed school performance in areas such as reading out loud, giving speeches, and introducing oneself to the class. Participants reported that reading out loud, giving oral speeches, answering questions in class, and having to introduce themselves caused them to have anxiety (Daniels et al., 2012). Moreover, the participants reported that their concentration was negatively influenced, which limited their ability to learn because their energies were expended elsewhere in terms of thinking of stuttering. Daniels et al. reported these participants felt as though learning was sacrificed because of having to face stuttering fears.

Participants used different kinds of techniques that stopped them from being labeled as people who stutter, but a fear of stuttering still limited their concentration when having to read out loud (Daniels et al., 2012). They were not able to adequately concentrate or remain on task and had anxiety about reading the material that came next as well as counting the number of students ahead of them and counting ahead to the paragraph that they were to read out loud (Daniels et al., 2012). Subsequently, they read the paragraph assigned to them ahead and focused on words and phrases to avoid stuttering (Daniels et al., 2012). This caused fearful anticipation, which is a commonly shared characteristic of people who stutter (Daniels et al., 2012).

The second subtheme Daniels et al. (2012) identified for school characteristics was relationships with teachers and peers. Although 19 participants posted comments about their relationships with teachers and peers, only 1 participant commented about having a negative experience with peers or instructors (Daniels et al., 2012). Some views were neutral, and others were positive (Daniels et al., 2012).

The third subtheme Daniels et al. (2012) identified was the academic and learning environment. The participants asserted that they were all affected differently in school, such as experiencing lower grades from stuttering and experiencing limited learning experience in a classroom setting (Daniels et al., 2012). Academic problems included limited concentration in class, missed learning opportunities, and lower grades on oral assignments (Daniels et al., 2012). One advantage for people who stutter is that they have a mechanism of overcompensation in place that causes an increase in classroom focus and motivation for learning (Daniels et al., 2012).

The last subtheme Daniels et al. (2012) identified was speech therapy. The intent of speech therapy is to use behavioral modification techniques to help people who stutter speak instead of focusing on social and emotional needs (Daniels et al., 2012).

Participants reported that they would have appreciated acknowledgment and discussion about stuttering, support groups, and interventions that discussed the emotions surrounding stuttering (Daniels et al., 2012). Furthermore, the participants saw little value in the speech therapy they received in school and found treatment in later years beneficial (Daniels et al., 2012).

Posteducational consequences. Daniels et al. (2012) referred to posteducational consequences to explain the way that stuttering affected the participants after their school experiences. The first subtheme in this category was having a fear of speaking situations that continued throughout some of the participant's lives. Negative school experiences affected the lives of people who stutter in college by stopping them from fully participating in classroom activities or causing them to become physically ill when having to read out loud in a social situation. Other adverse school consequences included making career choices based on bad school situations or becoming more sensitive or humble (Daniels et al., 2012).

The second subtheme was personal identity, which referred to the way participants perceived the role that stuttering played in their personality and identity development (Daniels et al., 2012). This subtheme was consistent with previous research conducted by Gabel et al. (2004), who found that stuttering affected employment experiences. Other similar findings stemmed from research conducted by Daniels and Gabel (2004), who found that stuttering played an influential role in personality, self-image, and identity construction.

Research suggests that social aspects to stuttering hinder development and maintenance for people who stutter in terms of discrimination in educational settings, jobs, and social situations (Bloodstein & Bernstein Ratner, 2008; Boyle et al., 2009). Stigmatization can lead to problems with self-esteem, social isolation, psychological wellness, and physical problems (Boyle et al., 2009).

**Personal reflections and observations of school.** Each participant in the Daniels et al. (2012) study provided thoughts on the subtheme of current school climate of people who are nonfluent while providing suggestions for school teachers and speech-language pathologists. The participants believed that speech–language pathologists had limitations in the classroom despite academic improvements that have been made, such as special education adjustments for people with disabilities (Daniels et al., 2012). Other participants thought that improvements were made for the school experience for people who stutter (Daniels et al., 2012). The results for overall school experience showed that peers who do not stutter rate the intelligence and personality characteristics of people who stutter more negatively (Daniels et al., 2012). Likewise, people who stutter were more prone to being teased because of the different public perceptions toward people who stutter (Hughes et al., 2010). In summary, Daniels et al. (2012) suggested that students who stutter had negative feelings, decreased attention, and decreased participation in the classroom; negative and positive experiences with teachers and other students; and, overall, a less fulfilling school experience.

Other people's opinions about people who stutter. Abdalla and St. Louis (2012) investigated the personal beliefs, knowledge, and attitudes of Kuwaiti school teachers toward students who stutter. Their study reflected the need for cross-cultural awareness about the attitudes that members of the general public hold regarding stuttering. St. Louis et al. (2001) developed POSHA to use as a universal type of questionnaire to evaluate public attitudes toward people who stutter.

Hughes et al. (2010) and Daniels et al. (2012) asserted the importance for educators, speech–language pathologists, and students to develop an appreciation of the thoughts and feelings of people who stutter. Many other researchers have sought to enhance their understanding about this speech–language impairment and to improve the overall learning experience for teaching protocols and treatment interventions (e.g., Murphy, Yaruss, & Quesal, 2007; Stasinopoulos, 2006; Yaruss, & Quesal, 2004).

Abdalla and St. Louis (2012) administered an Arabic translation of an adapted version of the POSHA instrument to rate Kuwaiti teacher perceptions toward people who stutter from a diverse cultural setting. Abdalla and St. Louis (2012) sought to acknowledge that stuttering does not discriminate across sex, race, or culture and exists in all walks of life. The purpose of their study was to provide information about the knowledge and beliefs of Kuwaiti teachers toward stuttering and, more importantly, to determine how to address students in the classroom who stutter no matter what the cultural setting might be (Abdalla & St. Louis, 2012). Abdalla and St. Louis (2012) used the POSHA-S questionnaire to measure the attitudes, knowledge, beliefs, and reactions of 262 in-service and 209 preservice teachers about stuttering. The participants used pen and paper to respond to questions asked about stuttering, such as etiology of stuttering, who should help people who stutter, reactions to stuttering, and the effect that stuttering has on people who stutter (Abdalla & St. Louis, 2012). They also identified the characteristics of people who stutter, such as being shy or fearful (Abdalla & St. Louis, 2012).

Abdalla and St. Louis (2012) used responses taken from the complete content sections of the questionnaire for their data analysis. They analyzed the detailed sections

to explore the knowledge and attitudes of Kuwaiti teachers toward stuttering, other kinds of reactions made by teachers toward people who stutter, and classroom teaching strategies (Abdalla & St. Louis, 2012). They used general descriptive statistics (frequency distribution cross-tabulations) and the nonparametric chi-squared test for independence was used to explore the participants' responses and set the statistical significance at *p* < .05 (Abdalla & St. Louis, 2012).

Abdalla and St. Louis (2012) used a chi-square test for independence to derive the relationship between statements on the questionnaire. An example of a statement would be, "I have a friend or relative who stutters" (Abdalla & St. Louis, 2012). Abdalla and St. Louis (2012) did not find a significant association between this statement and any of the 39 items (p < .05). Other results indicated that having known someone who stutters did not affect the knowledge, beliefs, or reactions of teachers toward stuttering and people who stutter (Abdalla & St. Louis, 2012). The results of their study reflected that despite the awareness and exposure to stuttering, some Kuwaiti educators continued to be misinformed about the etiology of stuttering and have stereotypical views about people who stutter (Abdalla & St. Louis, 2012). Forty-three percent of the in-service teachers and 56% of the preservice group stated that they knew someone who stuttered or had a relative who stuttered (Abdalla & St. Louis, 2012). Only 31% of the professionals revealed that they had any kind of knowledge about stuttering and revealed their sources of information as the Internet, media, and books (Abdalla & St. Louis, 2012). Only 7% of teachers stated that they obtained information about the disorder from seminars and other professionals in the field (Abdalla & St. Louis, 2012). Of the participants, 40%

acknowledged that they had a student who stuttered (Abdalla & St. Louis, 2012). Three-fourths of the teachers had negative stereotypes about people who stutter, which is similar to research findings that have been conducted on different society groups in the United States and other places around the world (Abdalla & St. Louis, 2012). This study did not present the ratio of male to female participants, which other researchers have suggested is an important factor (Al-Khaledi, Lincoln, McCabe, Packman, & Alshatti, 2009; Medeiros de Britto Pereira et al., 2008; Schlagheck et al., 2009; St. Louis et al., 2005).

Al-Khaledi et al. (2009) also studied school experience. For this study, speech disfluency was evaluated by surveying 424 Kuwaiti parents across 18 government academic settings. POSHA-E, developed by St. Louis (2005), was used to question the parents about their attitudes, knowledge, and beliefs toward people who stutter.

An important aspect of the Al-Khaledi et al. (2009) study was the examination of parental attitudes that might prevent a caregiver from obtaining treatment for a child who has speech disfluency. Moreover, Al-Khaledi et al. investigated how the attitudes and beliefs about stuttering held by parents may help to determine potential Western treatments, such as focus groups, and future educational programs for Kuwaiti parents. Additional information might provide speech–language pathologists with better assessment techniques and treatment protocols to aid in early intervention (Khaledi et al., 2009). Early detection is a critical component of successful treatment and can be accomplished by educating parents and society through the continued efforts of the scientific community (St. Louis, 2005).

Al-Khaledi et al. (2009) used an adapted version of POSHA (POSHA-A) developed by St. Louis (2005) to measure attitudes, knowledge, and beliefs toward stuttering in general and people who stutter as well as other aspects of the human condition. The POSHA-A is an instrument that has been shown to have good internal consistency (according to Cronbach's alpha coefficients scale that has a setting for 70 or above; St. Louis, 2005).

Al-Khaledi et al. (2009) obtained demographic information from Kuwaiti and non-Kuwaiti parents of preschool and school-aged children; 62% of the participants were women and 38% were men. The participants were divided into two age groups: 39 years and younger and 40 years and older (Al-Khaledi et al., 2009). Al-Khaledi et al. also provided categories for participant educational levels, such as up to secondary school, nonbachelor's degrees, bachelor's degrees, and higher levels of education. Al-Khaledi et al. attempted to control for sex by distributing three labeled surveys to the participants. The results of these surveys showed that twice as many women as men filled out the questionnaires (Al-Khaledi et al., 2009). The method of analysis used was descriptive statistics for finding common themes and patterns between age, sex, educational level, attitudes, and knowledge and beliefs about stuttering (Al-Khaledi et al., 2009).

On the survey, eight characteristics were listed to be compared with stuttering: left handedness, mental illness, obesity, alcohol addiction, HIV/AIDS, multilingualism, epilepsy, and wheelchair use (Al-Khaledi et al., 2009). The responses were as follows: very positive, somewhat positive, neutral, somewhat negative, very negative, and unsure. General sections of the POSHA-A included questions about the overall impressions of a

person with a specific attribute, how respondents would feel if they had an attribute, the amount of knowledge respondents have about the attributes, and any social contact with a person who has a listed characteristic on the questionnaire (St. Louis, 2005). The questions about the human attributes were four pages long, and responses were provided about the following: the characteristics of people who stutter or are obese; the causes of stuttering/obesity; who should help people who stutter or are obese; general knowledge questions of concern if different kinds of people who stuttered/were obese; and respondent's feelings and actions toward a person who stutters/is obese (Al-Khaledi et al., 2009).

A total of 762 assessments were returned to the investigators of the original 1158 dispersed to 18 schools and governorates (Al-Khaledi et al., 2009). To ensure a wide sampling range of participants, Al-Khaledi et al. (2009) chose three schools randomly (from the six Kuwaiti governorates) and chose one classroom from each school.

Results of the Al-Khaledi et al. (2009) study showed that the level of education people have makes a difference in terms of how they respond to a person who stutters. For example, a person with more education would not attempt to help people who stutter along with their speech by filling in words for them while they speak, nor would they be apt to make fun of a person who stutters (Al-Khaledi et al., 2009). Women were unsure of how to react to someone with disfluency by not being sure whether they should look away (Al-Khaledi et al., 2009). The results of survey statements such as these indicated that most participants (87% men; 85% women) would patiently wait while a person who stutters attempted to finish his or her speech (Al-Khaledi et al., 2009). This might be an

indication that the overall public is empathetic and sensitive toward people who stutter (Al-Khaledi et al., 2009).

The results for the category regarding participants' knowledge of stuttering (in terms of stuttering causes and parental actions) showed that parents had a lack of knowledge about stuttering (Al-Khaledi et al., 2009). Of the respondents, 33% specified that their knowledge of stuttering was limited, and 43% were under the impression that stuttering is a genetic condition; most were unaware of the etiology of stuttering (Al-Khaledi et al., 2009). Likewise, most participants attributed stuttering to being a psychological or emotional problem, and one-half of the respondents specified that people who stutter should not be employed as teachers, doctors, lawyers, or politicians (Al-Khaledi et al., 2009). Parents indicated they would fill in the words for people who stutter in their attempt to speak fluently and believed that people who stutter were afraid and shy (Al-Khaledi et al., 2009). Most participants did not have opinions that suggested people who stutter are less intelligent than people who do not stutter (Al-Khaledi et al., 2009). Sixty-six percent of the respondents blamed stuttering on the overreaction of some parents to correct their children's stuttered speech (Al-Khaledi et al., 2009). However, most parents reported that they would seek the services of a speech-language pathologist if their 4-year-old child had disfluency (Al-Khaledi et al., 2009).

Al-Khaledi et al. (2009) found that 35% of the participants in the acquaintance category knew someone who stuttered. They also determined that people's education affected their actions toward people who stutter (Al-Khaledi et al., 2009). The educational level of both male and female participants influenced whether they would

"wait patiently" while people who stuttered spoke, giving them a chance to speak without finishing their sentence or interrupting them (Al-Khaledi et al., 2009). In addition, Al-Khaledi et al. found that in the acquaintance category, participants indicated some of the survey respondents had a child who stuttered or someone in their family had disfluency. Thirty-five percent of the participants had neutral opinions about stuttering, and two-thirds of the parents surveyed stated they would be upset if their child had a stuttering disorder (Al-Khaledi et al., 2009).

Other outcomes of this research showed that 72.5% of the respondents had crossed paths with someone who stuttered, and 27% had a close relative with disfluency; 35% of the participants had indifferent views about stuttering (Al-Khaledi et al., 2009). Meanwhile, 68% of the parents reported that they would feel distressed if they were afflicted with stuttering (Al-Khaledi et al., 2009).

### Financial Domain

People who stutter may have financial burdens in terms of finding employment and remaining employed in a job for basic survival needs. The financial domain addresses these aspects of living, as well as economic issues associated with maintaining fluency for job-related reasons.

The financial hardships that people who stutter endure have been investigated by examining the money spent to maintain fluency (Blumgart et al., 2010a). A person who is not consistently fluent might risk losing his or her job, which will ultimately affect that person's quality of life (Blumgart et al., 2010a). Blumgart et al.'s (2010a) quantitative study investigated the personal financial costs incurred by people who stutter regarding

self-help treatments, attending conferences, and seeking help for other kinds of problems associated with stuttering, such as fatigue (constant monitoring of their speech); social anxiety; and reduced social, emotional, and mental health functioning.

Stuttering has a negative effect on quality of life by causing fatigue, which inadvertently affects a person socially, emotionally, and mentally (Craig, 2010). The negative effect that occurs when a person's ability to become gainfully employed is threatened affects his or her overall quality of life. A constant threat exists for people who stutter in the workplace because of having a sense of uneasiness (emotionally and financially) due to the threat of being dismissed from their job or being passed over for potential job advancement (Craig, 2010). Subsequently, people who stutter may be placed in a job setting where they work below their true ability (Hurst & Cooper, 1983).

Blumgart et al. (2010a) interviewed 200 men and women (male-to-female ratio was 3.1:1; 151 men:49 women) who stutter over a 2- to 3-hour period. The participants who were not able to take part in the informal discussion and structured interview face to face were consulted by telephone or by mail to collect the data (Blumgart et al., 2010a). The participants ranged in age from 18 to 85 years and were gathered from self-help groups, private speech practices, general medical practices, speech pathology departments of public hospitals, and community health centers (Blumgart et al., 2010a). Blumgart et al. estimated the personal cost incurred for stuttering for each participant over the previous 5 years. They calculated stuttering severity from a 3-minute sample of conversational speech for stuttering severity (i.e., mild, moderate, or severe). A clinician and a researcher reevaluated 10% of speech samples from people who stutter to confirm

reliability (Blumgart et al., 2010a). Blumgart et al. established interrater reliability for stuttering frequency by percentage of stuttering severity [mean percentage for rater 1 = 3.37, standard deviation (SD) = 3.4; rater 2 = 3.66, SD = 3.5; degrees of freedom (df) = 38, t = 0.25, p = ns; Pearson correlation r = 0.99, p < .01]. They also compiled the annual income for all 200 participants over the last 5 years. Further, the participants completed Part 1 of the Lifestyle Appraisal Questionnaire (LAQ; Craig et al., 1996) for health risk factors such as body mass index, diet, alcohol and nicotine consumption, and medical diseases such as hypertension (Blumgart et al., 2010a). The test–retest reliability of the LAQ has been shown (Craig et al., 1996).

Blumgart et al. (2010b) evaluated social anxiety by using the Fear of Negative Evaluation-Long Form (Watson & Friend, 1969). Socioeconomic measures covered household annual income and details regarding the financial costs incurred from stuttering over a 5-year span prior to the assessment (Blumgart et al., 2010b). Blumgart et al. showed that 94% of the participants had received some kind of treatment for their stuttering; 50% of the subjects felt that their stuttering made it hard to find a job; 37.5% felt that they had not been promoted because of their communication disorder; and 75% felt as though they had been dismissed from their job because of stuttering. Blumgart et al. reported that most the participants spent at least \$5,478 on costs related to their stuttering in the past 5 years. Blumgart et al. also asserted that a quality-of-life burden is placed on people who stutter because of an increased risk of psychosocial morbidity associated with stuttering, especially for younger people. Furthermore, they suggested that providing better financial reimbursements for stuttering, providing better treatment

accessibility, and addressing the negative impacts of stuttering need to be emphasized (Blumgart et al., 2010b).

# **Summary**

Stuttering is a complex speech disorder that has been studied extensively and reported on in the literature. Research now indicates that stuttering has a physiologic etiology (Maguire et al., 2012). The causes for stuttering are multidimensional in nature, which might account for why people who stutter are misunderstood by their peers and the community (Nordqvist, 2009). Many theoretical explanations have been proposed for treating stuttering that have focused on the different problems associated with the tongue, larynx, anxiety, and behavioral modification techniques such as fluency shaping (Maguire et al., 2012). However, stuttering treatment should focus on problems that involve different aspects of the condition, such as the social stigma and stereotypes related to this communication disorder.

In this qualitative study, I explored the personal experiences of women who suffer from this phonological disorder and identified the positive coping strategies they use every day to deal with their disfluency. This information can be used to diminish bias toward people who stutter and to help them to be successful in life by helping people who do not stutter understand the nature of this communication disorder (Gabel et al., 2004).

People who stutter may find themselves in awkward situations and avoid social contact because of their disfluency. Using avoidance or escaping methods can lead to social isolation, causing impairment in self-esteem or self-worth (Plexico, Manning, & Levitt, 2009). These kinds of emotional problems prevent the person who stutters from

leading a normal life and interfere with many aspects of daily living, such as employment, relationships, and education (Klein & Hood, 2004). With the continued efforts of researchers, quality of life might be improved for people who suffer from this fluency disorder. My study provides an appreciation for the kind of suffering that people who stutter, along with their families, endure. Earlier interventions could prevent stuttering from developing, as well as save a person who stutters from long-term emotional pain and suffering (Maguire et al., 2012; Daniels, Gabel, & Hughes, 2012). Different treatment outcomes could empower people who stutter, making them successful in the four domains of the study (Plexico et al., 2005).

Chapter 3 presents the qualitative methodology for answering the research questions: the methodological framework for the study, the role of the researcher, plans to establish the trustworthiness of the data, participants, data collection tools, data investigation plan, and the ethical and legal procedures to ensure the protection of human participants.

## Chapter 3: Research Method

The women who stutter have an altered quality of life that causes them to endure significant pain and suffering in the social, occupational, academic, and financial domains of life. Traditionally, qualitative studies for stuttering treatment outcomes have focused on measuring observable changes in the characteristics of stuttering (Blumgart, Tran, Yaruss, & Ashely, 2012). Few studies have explored the quality of life of women who stutter in the four domains of life (Medeiros de Britto Pereira et al., 2008). The literature has been limited on the general problems that women who stutter encounter when trying to communicate in everyday life, as well as the psychosocial consequences they face in those general situations (Yaruss, 2010).

Through this phenomenological study, I identified the perceptions, thoughts, and feelings of women who stutter regarding how their speech disorder has affected them socially, occupationally, academically, and financially. I also explored the positive coping strategies that these adult women have used in each of these four areas of their lives. Through qualitative phenomenological research, the findings for this study can increase public awareness regarding how stuttering has affected women in these areas of life. Relating the personal experiences of women who stutter may help to broaden public awareness and improve their quality of life (Hughes et al., 2010).

In Chapter 3, I describe the qualitative, phenomenological methodology. The chapter documents the research design, participants, role of the researcher, data collection methodology, ethics, data analysis, and validity and reliability processes.

## **Research Design and Rationale**

Qualitative research is beneficial when seeking complex, detailed information about a small sample of individuals (Creswell, 2007). Individuals' personal experiences and personal opinions are valuable in qualitative research. Qualitative research is also beneficial when researchers want to discover whether a particular research question needs further investigation (Creswell, 2007). Qualitative research explains the reasons behind particular behaviors, explores possible social ramifications, expands on quantitative results, and suggests or revises an existing theory (Creswell, 2007). The descriptions of the person's experience let the phenomena speak for itself (Creswell, 2007).

Phenomenology attempts to discover "what exists" from the perspectives of those who went through the experience. Giorgi (1985) stated,

Adopting a strictly descriptive approach, we can let the phenomena speak for themselves, and when we do discover that whatever appears suggests in its very appearance something more which does not appear, which is concealed that is in the appearance of phenomena is "directionality," a direction is offered or a significance is held out which we pick up and follow, or turn away from. (p. 151)

Wertz (2005) emphasized individual subjective experience in phenomenological research:

Phenomenological research seeks the individual's perceptions and meaning of a phenomenon or experience; and calls upon the researcher to suspend theories, explanations, hypotheses, and conceptualizations, to be able to understand the phenomenon as it exists prior to and independent of scientific knowledge. (p. 168)

This return to phenomena as they are lived is a methodological procedure for the sake of fresh research to access the matters being investigated (Wertz, 2005). The aim is to understand the event(s) from the point of view of the participant (Wertz, 2005). The feature that distinguishes phenomenological research from other qualitative research approaches is that the subjective experience is at the center of inquiry (Wertz, 2005). Qualitative studies on stuttering have shown the need for further investigation of the complexities of this chronic neurological condition that has a negative effect on quality of life (Craig et al., 2009; Namasivayam & van Lieshout, 2008).

Researchers have used qualitative studies to show that stuttering diminishes the quality of life psychologically and emotionally for people who stutter and impairs their social functioning by elevating trait and social anxiety (Blumgart et al., 2010b). Previous qualitative studies have focused mostly on the measurable changes in speech instead of considering the difficult attempts for the speaker to communicate in everyday life situations and the consequences of this disfluency (Yaruss, 2010). My study differed from other research, because it focused on the individual subjective experiences of women who stutter in four life domains. Due to the ratio of men to women who stutter, little research has been conducted on women who stutter (Blumgart et al., 2012; Yaruss, 2010). For this reason, women are an understudied population, which provided the impetus for this study.

Phenomenology is one of the oldest research methods, tracing its origin back to German philosopher Edmund Husserl (Smith, 2016). His perspectives have been adapted and adjusted into what is now referred to as *phenomenology* or the *phenomenological* 

*method* (Moustakas, 1994). This method attempts to identify the lived experiences of individuals regarding a particular phenomenon (Moustakas, 1994).

The empirical phenomenological approach involves a return to experience in order to obtain comprehensive description. Descriptions keep a phenomenon alive, illuminate its presence, accentuate its underlying meaning, enable the phenomenon to linger, retain its spirit, as near to its actual nature as possible. (Moustakas, 1994, p. 59)

Creswell (2007) claimed that as people talk about and describe their experiences, an understanding of the phenomenon being studied is disclosed. Creswell (2007) claimed, a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon. The basic purpose of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence. (Creswell, 2007, p. 236)

The following research questions were addressed:

- 1. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *social interactions*, and what positive coping strategies have they used?
- 2. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *occupations*, and what positive coping strategies have they used?

- 3. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *formal education*, and what positive coping strategies have they used?
- 4. What are the perceptions and experiences of adult women who stutter regarding the stressors on their *financial matters*, and what positive coping strategies have they used?

# **Participants and Procedure**

# **Population**

After obtaining Walden Institutional Review Board (IRB) approval to proceed with the data collection, I recruited adult women who stutter through online announcements from groups such as the National Stuttering Association and local stuttering groups. The announcements provided a brief explanation of the study, including that the intention with this research was to understand the perspective of women who stutter and their life experiences. Potential participants were informed that involvement in the study was voluntary and that confidentiality would be ensured. I recruited 10 participants for this study. I did not require a secondary recruitment.

### **Inclusion and Exclusion Criteria**

The participants in this study met the following inclusion criteria: women who experience stuttering who were between the ages of 21 and 78 years. Women who stutter may have had a formal diagnosis as a person who stutters or may have self-identified. Self-identification as a person who stutters was acceptable for this study to allow for easier recruitment; this inclusion criterion has been acceptable in prior studies (Chang et

al., 2009; Kang et al., 2010; Maguire et al., 2010; Plexico, Manning, & DiLollo, 2010; Yairi & Ambrose, 2013 Yaruss, 2010)

The study was conducted with only women who stutter, because they are an understudied population due to the higher ratio of men to women in people who stutter (Craig et al., 2002). Therefore, I excluded men from the study, as well as women who were not considered to have developmental stuttering. Exclusion criteria for this study were fully justified.

#### **Potential Risks and Benefits**

I considered anticipated risks or difficulties from participation in this research in terms of current negative emotions or painful memories. Risks and benefits were disclosed on the consent form by providing an explanation of the nature, anticipated results, and conclusions of the research. The IRB approval number for my study is 10-30-15-0073395. A benefit for participating in the study was the ability to endorse continued research for women who stutter as well to emphasize quality of life. Another benefit was that participants would be able to talk about life experiences as they relate to stuttering, share relevant information to broaden the awareness of the general public, and identify ways to cope with stuttering. A risk factor associated with this study was that participants might recall unpleasant events in their lives that would bring up painful emotions. I made provisions to help or support any of the participants who needed it due to stress and anxiety caused by this study. I used a debriefing technique (desensitizing; Bersoff, 2008, p. 416) to allow participants to verbalize any fears, worries, or anxieties that the research

caused until any emotional harm was removed. I made all efforts to ensure that no harm was brought to the participants.

Debriefing techniques were not needed for any of the participants. To ensure confidentiality, participants signed an informed consent form indicating they understood any risks associated with the study. Safeguards were in place regardless of whether the risk was deemed to be high or low.

I reviewed associated risks with this study with the participants. Even though a plan was in place to refer those needing supports to any of the following groups, it was not necessary because none of the participants experienced distress after conducting the interviews. Some of the participants said they already had professional assistance and reported feeling fine.

### Hardware and Software for Data Collection

Data collection tools used for the study were audio-recorded in-person interviews or face-to-face Skype<sup>TM</sup> (Luxembourg City, Luxembourg) sessions conducted with the participants. I used an Olympus (Shinjuku, Tokyo, Japan) tape recorder designed for recording and transcribing information to facilitate data collection and transcription. I selected InScribe<sup>®</sup> (Mt. Pleasant, SC) digital medical transcription software as the transcription software.

#### Role of the Researcher

My role as observer—participant was to protect the rights of all human participants by outlining the guidelines for this study, as set forth by the IRB. According to these guidelines, a description of the research included the ethical rationale for each data

section as well as how the data would be analyzed, including the descriptions of participant duties to be completed.

I had no conflicts of interest to report. Conflicts of interest would have included a personal relationship with a participant that might skew the results of this research. Therefore, no participants were included in this study with whom I had a personal relationship. I brought some personal biases to the research process. These included biases related to the medical and mental health fields. The literature indicated that people who stutter are viewed by the general public as being less intelligent than people who do not stutter or as not being capable of having good performance abilities in the workplace or in educational settings (Boyle et al., 2009; Craig, 2010). Therefore, the public overlooks how these people are stereotyped, which might prevent them from becoming an integral part of society. In performing the research, this societal stereotype influenced me to become cynical toward educators, employers, or medical personal regarding how they view and treat people who stutter. This perception had the potential to cloud my objectivity in terms of remaining neutral regarding the subjective experiences of women who stutter. Personal experience with someone in my life who stutters is a bias on a more intimate level, because I have witnessed the person's pain and suffering first hand. However, this perception did not affect the outcome of the study, because I acknowledged and understood the vulnerabilities regarding the opinions of others toward people who stutter. Further, I prevented transference by discussing negative feelings with colleagues during the research, as needed.

My personal experience and professional consultations with Dr. Scott Yaruss and Dr. Kenneth St. Louis made me aware of the problems people who stutter encounter in life. More importantly, the dissertation experience taught me how to converse with people who have disfluency in terms of how to facilitate a conversation. Having a welcoming environment makes a person feel at ease and was the impetus to facilitate a discussion about speech disorders. The tenets of positive psychology were applied throughout the interviewing process. This helped participants to move toward self-disclosure, especially when they experienced difficulty talking about their speech impediments or had problems with communication. I implemented empathy, compassion, and understanding so that participants knew their life struggles were being acknowledged.

Ethical issues in this study were managed by adhering to basic ethical principles, such as protection of human subjects in terms of Internet research, using Skype, making sure individuals would not be identified directly or indirectly, having a debriefing method, avoiding breach of confidentiality, and obtaining informed consent (Bersoff, 2008, pp. 426–431). I confirmed that the National Institutes of Health guidelines for research involving human subjects ensured boundaries between practice and research (National Institutes of Health, Office of Extramural Research, 2013).

# **Data Collection Methodology**

Guided semistructured interviews were used to explore the subjective lived experiences in four life domains of women who stutter. The qualitative data provided a foundation for the experiences and insight of people who stutter, communicated through

a personalized description of the events believed to cause pain and suffering. According to Mertens (2013), semistructured interviews ensure analysis of essential issues while allowing participants flexibility in their responses by using open-ended questions so that salient features of their life experiences may emerge. Participants were asked four structured questions that addressed the research questions. The interview questions can be viewed in Table 1 and Appendix A.

The discussion began by asking general questions about speech, as described by Yaruss (2001); these included self-awareness, knowledge, and coping skills that included any involvement with speech fluency training. The interview questions were structured so that interviewees could give a full account of how stuttering had affected their lives. The interview questions focused on features of the stuttering disorder in terms of how disfluency interfered with their quality of life in four domains. The emotional effect of stuttering was brought forth during the interviews, as well as the forms of positive coping strategies these women used to cope with their dysfluency.

The telephone or Skype interviews occurred in a secure setting to ensure confidentiality of protected health information. Interviews lasted between 15 minutes and 4 seconds through 45 minutes and 12 seconds. The discussions did not go beyond the timeframe. If the woman's stuttering was severe, I gave her enough time to complete her thoughts. Any interviewees were allowed exit the interview at any time they so desired.

I reviewed the copies of the transcribed interviews with each participant for their approval (i.e., member checking). I conducted follow-up interviews via telephone or Skype to review the shared data themes from the theme coding. In the follow-up

interviews, I reviewed the common themes for each participant to ensure accuracy of interpretation; follow-up interviews did not exceed 30 minutes.

I study implemented purposive sampling procedures to select women who stutter. Glicken (2003) defined purposive sampling as the method used to select a population with vital characteristics for the research. Berg (2004) added that participants have specialized knowledge or expertise that represent a population. The real-life experience of women who stutter provided the knowledge and insight regarding

Table 1

Interview Protocol

Research Question Number	Research Question	Subquestions	Interview Questions With Inquiry
RQ 1	What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their social interactions, and what positive coping strategies have they used?	What kind of social experiences have you had because of your stuttering? Has stuttering affected your ability to make friends or has stuttering interfered with romantic relationships? Has stuttering made you feel awkward in a crowd of people?	1(a). Can you describe what these experiences were like for you?  1(b). Can you explain how you experienced what you described in terms of your feelings and reactions to the experience. Has your social experience with stuttering changed you in any way? What coping skills have you used to improve your social experience?
RQ 2	What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their occupations, and what positive coping strategies have they used?	Has stuttering caused you problems with employment? Has it cost you a job or promotion or made you take a lower-paying job? Has stuttering ever given you an employment opportunity?	<ol> <li>Has stuttering caused you not to seek certain kinds of employment?</li> <li>Has your experience with stuttering kept you from applying for a job?</li> <li>Has your experience with stuttering caused you to be left out of work-related</li> </ol>
			group tasks?  1(c). Caused you problems with a supervisor being inpatient or rude?  1(d). Being placed in a job that you are over- or underqualified for, or caused you to stray away from certain kinds of job settings and what coping strategies have you used to maintain employment?

(table continues)

Research Question Number	Research Question	Subquestions	Interview Questions With Inquiry
RQ 3	What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their formal education, and what positive coping strategies have they used?	What are your academic experiences regarding your stuttering?  How has it affected your learning interactions with peers in educational settings? What types of reactions have you experienced from educators or peers?  At what level of education did you experience these reactions?	<ol> <li>What was the experience like for you in school?</li> <li>What about your school experience stands out or resonates with you?</li> <li>How did the experience affect you?</li> <li>What did you do in school situations regarding your stuttering, and what coping strategies have you used?</li> </ol>
RQ 4	What are the perceptions and experiences of adult women who stutter regarding the stressors on their financial matters, and what positive coping strategies have they used?	Have you experienced financial problems because of stuttering? Has it caused you financial hardship because of lack of employment, placed a strain on you because of the cost for speech therapy, or impaired your ability to meet basic survival needs or live above a certain socioeconomic standard?	<ol> <li>Has stuttering caused you to experience financial difficulties because you are not able to make a good living?</li> <li>Not able to afford health care insurance?</li> <li>Cannot pay for speech therapy services?</li> <li>Not able to afford to live in a desirable neighborhood or have suitable transportation?</li> <li>What coping strategies have you used to obtain a job?</li> </ol>

the way stuttering has affected their quality of life. A sample size of 6 to 10 participants was suggested by Mertens (2013) for this type of research. The sample size in this study consisted of 10 participants.

The study implemented the following data collection procedures:

- I e-mailed announcements regarding the study to Speech–Language
   Pathologist's Stuttering via the website for The Stuttering Foundation.
- I made contact directly with potential participants who were interested in this study.
- Using the inclusion criteria, I contacted potential participants for the study.
- I sent consent forms by electronic transmission to participants who qualified for the study. Consent forms were returned to me.
- For those participants who qualified for the study, I set up the interview times at the convenience of the participants.
- Interviews took place during Skype sessions conducted with the participants. I conducted the interviews in a secure office via a computerized Skype session that is in a secured building. This guaranteed that protected health information remained confidential. I audio recorded and transcribed all interviews. To prevent a breach of confidentiality, I took precautions to prevent private, identifiable information from being disclosed. As a precautionary measure, I omitted names from the identity of the participants form and replaced them with a combination of numbers so that participants could not be identified by anyone but me.

- I sent copies of the transcribed interviews to the participants for their review and for member checking approval by asking the participants to review the collections of themes for accuracy and interpretation.
- I made arrangements for follow-up procedures, such as member checking
  interviews to ensure accuracy of the data collection. I maintained the audiorecorded and transcribed notes in a locked room with a secure file cabinet to
  ensure the safety of protected health information.

#### **Ethical Procedures**

#### **Informed Consent**

Informed consent was obtained and documented from all study participants. All documents were submitted as archival data to ensure protection of confidential data until data were destroyed when the research ended. The data will be retained for a period of 7 years or the time designated by the university.

Any associated risks or potential benefits involved for participating in the study were described on the consent form. The consent form outlined any possible hazards such as breach of confidentiality associated with Internet research (Skype or other electronic devices), research deception, and response to sensitive interview items that participants might undertake in the research, as well as minimizing the risks for the participants, while providing documentation for the procedures used. I divulged a full description of the procedures used in the study to the participants to ensure confidentiality and to maintain integrity. I outlined inclusion and exclusion criteria to confirm research benefits for those who were participating in the study. Any participants who were particularly vulnerable

were protected from undue pressures to participate in the research, as well as any safety or privacy risks. Informed consent forms were obtained from all participants.

## **Data Integrity and Confidentiality**

I took measures to ensure confidentially by having a laptop computer fully encrypted to protect the identity of the participants. I coded the names of the participants numerically to protect the identity of each person. The data will be stored for an amount of time set forth by the IRB for 7 years, kept in a secure locked setting. No one has access to the site where the research was kept except for me. The contents of the research will be locked in my office in a filing cabinet. No identifying information is in the file so that there can be no a breach of confidentiality.

The participants were protected from any violation of their privacy by adhering to the Federal Wide Assurance (FWA) for the protection of human subjects (U.S. Department of Health and Human Services, 2011). Furthermore, there was no pressure for participants to take part in the study or to remain in the research despite informed consent.

## **Data Analysis Procedures**

I analyzed the data using the following procedures: I listened to interview audio recordings. I transcribed the interviews. I identified and analyzed the meaning units; I then assigned the meaning units ideographic theme names that I identified on the discourse articulated by the participants. Saturation was reached when no new themes appeared in the characteristics of the participants. Saturation was reached with 10 participants. Therefore, I did not need to implement a secondary recruitment plan.

During the analysis and coding, fewer and fewer themes were presented going from Participants 1 through 8. However, saturation had not yet been reached. Therefore, two additional participants were recruited. The interviews from the last two participants were analyzed to determine whether any new themes were identified. No new themes emerged in the interviews transcribed from Participants 9 or 10, and saturation was achieved.

I assigned the meaning units ideographic theme names based on the discourse articulated by the participants. An idiographic theme is individualistic and unique to each specific participant (Vogt, 2005, p. 150). I identified common idiographic themes through open coding. Open coding is a way in which data are reduced to smaller themes to describe the phenomenon or phenomena under inquiry. Following Leddy and Ormond (2013, p. 147), I divided the data into segments and then scrutinized for commonalities that reflect categories or themes. Inductive coding began with reading the text and identifying multiple meanings. I categorized meaning units from the raw data on the perceptions and experiences of adult women who stutter regarding the stressors on their financial matters and the positive coping strategies they have used. I further examined the data for properties such as certain characteristics or subcategories that reflected each section through inductive analysis of the themes that emerge.

Nomothetic themes are defined as the convergence of themes identified through the perspectives of participants and the commonality about the phenomenology of stuttering (Vogt, 2005, p. 207). I tabulated common idiographic themes voiced by multiple participants into nomothetic themes that seemed to be occurring at a higher

frequency among people who stutter. Similar interrelated nomothetic themes were identified as theme clusters.

## Validity and Reliability

## **Trustworthiness**

Trustworthiness is the degree to which research findings are reliable and accurate. Trustworthiness can be established through verification of dependability, conformability, and thick, rich description (Leddy & Ormond, 2013; Vogt, 2005). According to Mertens (2013), dependability occurs when each step of the research/interview process can be verified. The details of the methodologies must be clearly described in a manner that allows for replication of the study (Shank, 2006). I clearly described data collection methods, which will allow others to validate my claims through an audit trail and central themes and data analysis.

I achieved trustworthiness through a thick, rich description of the interviews (as described by Leedy & Ormrod, 2013), which allows the reader to internally visualize the experiences, to transpose to the settings conveyed (as described by Creswell, 2007), and to draw conclusions through the data presented. The process of establishing conformability verifies the conclusions established by a researcher (Shank, 2006). Shank (2006) stated that concurrently, conformability may occur through the same audit, which allows the data and the identified themes to be backtracked to the original source. This validates the researcher's findings and confirms that the conclusion of the study can be supported by the data (Mertens, 2015) through an audit trail. Another method to ensure trustworthiness for this study was through member checks (Vogt, (005). A collaborative

process between a researcher and participants guarantees accuracy of the data by reviewing themes collected and interpreted (Mertens, 2013, p. 269). The interviews were reviewed with the participants to ensure the data obtained represented what they told the researcher.

# Triangulation

Triangulation of the data established the trustworthiness for this study.

Triangulation comes from the field of geography, specifically land surveying. Yeasman and Rahman (2012, p. 157) noted that "the triangulation metaphor is from navigation and military strategy that uses multiple reference points to locate an objects exact position."

The different vantage points allow for greater accuracy (Mertens, 2015). Therefore, in research, a concept is better measured by viewing it from different perspectives. As a methodological approach, triangulation contributes to the validity of research findings, which can be achieved through the process of investigator triangulation (Mertens, 2015). I triangulated data using an audit trail, a co-rater, and member checking.

The first step for data analysis (coding) was to conduct audiotaped interviews to guarantee interpretation accuracy of what the participants were stating. This contributed to any missed opportunities for more probing, clarification, and elaboration for questions. This process of auditing provides evidence for documentation of central themes and data analysis. I used a spreadsheet to keep track of meaning units and themes. An *audit trail* is a scientifically maintained documentation system that is a tool for the inquirer (Mertens, 2015). It evaluates the dependability of the inquirer's methods and procedures (Mertens, 2015). The audit trail is simply a method of documentation that examines the study data

via theory, concepts, and models used to analyze the data (Mertens, 2015). The audit trail is an objective evaluation of a researcher's study in the accumulation of data, how it was structured, and, subsequently, the final analysis of the entire study (Mertens, 2015). The researcher uses the audit trail to keep track of his or her own records, but most importantly, an outside examiner can use it to objectively evaluate the dependability of the process itself and its conclusions (Swandt, 2007, p. 12). The second step required my collaboration with co-rater to analyze and identify meaning units from the transcripts to make the participants conversions into themes. The investigator and the co-rater of this study collaborated to identify threads of words in participant sentences that carried idiographic themes.

In the third step, I reviewed the copies of the transcribed interviews with each participant for their approval. This is called *member check* (or validation; Vogt, 2005). I reviewed the copies of the transcribed interviews with each participant for their approval (i.e., member checking). In the follow-up interviews, I reviewed the common themes for each participant to ensure accuracy of interpretation.

## **Summary**

In Chapter 3, I outlined the research design for the study, as well as ethical procedures and obligations to participants. Chapter 4 documents the findings of the study and Chapter 5 discusses and summarizes the results.

#### Chapter 4: Results

#### Introduction

In Chapter 4, I describe the setting of the interviews, participant demographics, and participant characteristics relevant to the study. In addition, I address the number of participants, variations in the data collection from the method presented in the Chapter 3, and any unusual circumstances encountered during the data collection. I go on to describe how the data were collected, including the interviews, saturation of the data, and the transcription of the data. Description of the data analysis included a discussion of member checking, the phenomenological data analysis method, and the discrepant case. Finally, I discuss key findings.

Through this phenomenological study, I identified the perceptions, thoughts, and experiences of women who stutter, regarding how their speech disorder has affected them socially, occupationally, academically, and financially. I also explored the positive coping strategies the women used in each of the four life domains. The results of this study provide educators, families, medical personal, speech—language pathologists, and the general public with a better understanding of the personal experiences of women who stutter and reveal their methods of coping as directly reported by the participants. Chapter 5 discusses the results.

### **Participants**

#### **Participant Recruitment**

The Walden IRB approved the recruitment letter and the method of distribution (via e-mail). The letter was distributed via e-mail through four channels also approved by

the IRB: The National Stuttering Foundation website (Stutteringhelp.org), speech—language pathologists I contacted as the researcher, Walden University student e-mail, and personal e-mail.

Ten participants were recruited. The original plan was to start with 10 interviews and add more participants as needed; however, only 10 participants were required for the study. All 10 participants read and signed the confidentiality and consent forms. I recruited some participants from a list of speech—language pathologists on The National Stuttering Foundation website (Stutteringhelp.org). Some speech—language pathologists contacted me directly through e-mail to acknowledge receipt of the letter of recruitment and to say they forwarded the letter of recruitment to a woman who stuttered. Also, women who stuttered initiated contact with me to participate in the study. One participant contacted me through the e-mail address listed on the letter of recruitment. I sent all participant volunteers the consent form letter and a confidentiality form to ensure ethical procedures were being followed.

# **Participant Demographics**

All 10 participants were from Western countries. Nine of the participants lived in various cities and towns throughout the United States. However, one participant lived in New Zealand at the time of the interview. All 10 participants provided information about themselves during the interview; some participants followed up through e-mail. Two participants did not provide complete demographic data.

#### **Inclusion/Exclusion Criteria**

The participants in this study met the following inclusion criteria: women who experience stuttering who are between the ages of 21 and 78 years. Self-identification as a person who stutters was acceptable for this study to allow for easier recruitment. Men were excluded from the study, as well as those who did not identify themselves as women who stuttered. I conducted the research with only women who stutter, because they are an understudied population due to the higher ratio of men to women in people who stutter. Therefore, exclusion criteria for this study were fully justified. The higher ratio in the literature may be due to women recovering from stuttering more readily than men or underlying genetic links in terms of more men than women stuttering in families (Cox et al, 2005).

#### **Data Collection**

#### **Interviews**

Interviews were conducted from June 22, 2016, through September 18, 2016. Ten participants met all the study criteria. As described in Chapter 3, the identity of each participant was numerically coded, and no identifying information was included on the transcripts. Each participant was assigned a three-digit numerical code (e.g., 001, 002, 003). The confidentiality forms are kept in a locked file cabinet in a secure office setting. In addition, the page and line number indicating where a theme emerged on the transcript from the interview were noted. Interviews took place in a secure setting where I prevented background noise from being present or sensitive discussions from being overheard.

All 10 individual interviews were conducted face-to-face through Internet Skype sessions. Nothing unusual regarding the characteristics of the interviewees interfered with the content being discussed during the interview sessions. However, during one of the face-to-face Skype sessions, a thunderstorm occurred, which disrupted the electronic transmission. The interview was completed at another time when Internet service was available for both parties. No important material was lost during the break in the interview session that impaired the integrity of the information conveyed.

The interview sessions with all 10 participants were shorter than I initially anticipated. The length of the interviews varied in time from 15 minutes 4 seconds to 42 minutes 12 seconds. The time variance in the participant interviews could be due to the degree of disfluency of each participant. In other words, some of the participants could not speak in longer time intervals because of their disfluency.

#### Saturation of the Data

Corbin and Strauss (2008) offered this definition of *saturation:* "Saturation is usually explained in terms of when no new data are emerging" (p. 143) from the interviews. I had initially anticipated that I would start with 10 interviews and add more participants as needed. When the last interview was complete, no new meaning units emerged in the collected data. Therefore, I reached saturation in the data collection because no new meaning units emerged in the collected data. The interpretation of the phenomena was represented in the collected data, and no new themes appeared in the characteristics of the participants. Therefore, a secondary recruitment plan was not needed, because saturation was reached with the 10 participants.

The structured interview questions were open ended to allow for participants to elaborate regarding their stuttering experiences. I followed a structured format in questioning, superseded by subquestions related to the main research question. After I conducted the first two interviews, I reviewed the transcripts. During the next eight interviews, I did not interpret what the participant was saying, because this might have led her to answer a question differently. The topics discussed have been recognized in the literature, and some of the participant answers were not unique (Plexico et al., 2009).

### **Transcription**

I used an Olympus (Shinjuku, Tokyo, Japan) tape recorder to record the interviews for the 10 participants. I replayed the recordings to confirm the accuracy of the transcripts while providing a deep understanding of the natural meaning units for the participants. The transcripts were transcribed using InScribe medical transcription software (Mt. Pleasant, SC), and a code name was placed at the top of all transcriptions.

### **Data Analysis**

### **Member Checking**

Vogt (2005) asserted that member checking is the practice of researchers submitting their data or findings to their informants (members) to make sure they correctly represented what their informants told them. This is most commonly done with data culled from interview summaries; it is less commonly done with the interpretations built on those data (Vogt, 2005, pp. 190–191).

To validate the accuracy of transcripts, I sent copies of the transcribed interviews to the participants for their review and approval (i.e., member checking). I conducted

member checking through follow-up contact so that each participant could review the data themes. This participant review occurred over the telephone or through e-mail.

### Phenomenological Data Analysis Method

I adapted the phenomenological data analysis method used to organize the data analysis procedure from Saldana (2009). At the top of the first page, I entered the code name of the participant and the date the interview took place.

- The transcription was double spaced, with consecutive line numbers for the whole transcript; the pages were numbered.
- The transcription included my dialogue as the interviewer as well as the participant's dialogue.
- As the transcripts were read, I identified singular points or ideas as meaning units.
   I then assigned meaning units idiographic themes, which were placed in the comment box.
- Each meaning unit conveyed a singular thought or idea that answered a question from the interview protocol. The comment box(es) was placed to the right margin of the transcript adjacent to each meaning unit—the idiographic theme represented the essence of what the participant said.
- The themes derived represented the essence of the participants' meaning units.

  Vogt (2005) defined idiographic themes that represent the essence of the participants' meaning unit as "individual, singular, unique, or concrete" (p. 150).
- A theme spreadsheet was created with a 1-inch margin on the left column and a 2½-inch margin on the right column. The lines of the theme spreadsheet were

double spaced throughout the text. All of the lines were numbered, as well as the pages. The spreadsheet was used to keep track of meaning units and themes and to analyze the idiographic themes from each participant. Recurring idiographic themes became nomothetic themes.

- The columns on the theme spreadsheet were as follows: Column 1–the number of each theme, Column 2—name of each theme to enter phrases and sentence fragments, Column 3—name/code number of the first participant, Columns 4 through 10—names/code numbers of subsequent participants.
- On the spreadsheet, I transferred the idiographic themes from each of the transcripts. Recurring idiographic themes were renamed nomothetic themes. Vogt (2005) defined nomothetic as "research that attempts to establish general, universal, abstract principles or laws" (p. 207).
- On the spreadsheet in Column 1, #001 was entered for the first idiographic theme from the first participant and subsequent themes; Column 2 contained the names of each of the idiographic theme from the first participant, and Column 3 contained the page number/line number of each theme from the transcript of the first participant. This step continued throughout the spreadsheet and included all 10 participants.
- I analyzed themes for all 10 participants by viewing the prior themes. If the theme was repetitive, the page and line number under the participant's name were entered. If a new theme emerged, it was entered at the end of Columns 1 and 2 as well as the number/line number under the column for the appropriate participant.

I reviewed the analyzed data with each participant to identify any misconceptions or incongruities (Creswell, 2003). Throughout the process, there was an audit trail that I kept aside from the collected data. The Olympus tape recorder kept track of the duration for the interviews.

Phenomenology in qualitative research attempts to identify the experiences of individuals regarding a particular phenomenon. According to Moustakas (1994), "The empirical phenomenological approach involves a return to experience in order to obtain comprehensive descriptions" (p. 13). Therefore, as people talk about and describe their experiences, an understanding of the phenomenon being studied unfolds. Creswell (2007) stated that

a phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon . . .. The basic purpose of phenomenology is to reduce individual experiences with a phenomenon to a description of the universal essence. (pp. 57–58)

Phenomenology attempts to discover what exists from the perspectives of those who went through the experience. Giorgi (1985) stated that "by adopting a strictly descriptive approach, we can let the phenomena speak for themselves" (p. 151).

# **Discrepant Case**

No unexpected or inconsistent findings warranted reporting.

#### **Trustworthiness of the Data**

Trustworthiness is the degree to which research findings are reliable and accurate.

Trustworthiness can be established through verification of dependability, conformability,

and thick description. According to Mertens (2013), dependability occurs when each step of the research/interview process can be verified. In this study, I clearly described data collection methods to allow others to validate and verify the claims through an audit trail and central themes and data analysis.

Another method to ensure trustworthiness for this study was through member checks. I engaged in a collaborative process with the participants to guaranteed accuracy of the data by reviewing themes collected and interpreted, as suggested by Mertens (2013). Trustworthiness was also achieved through a thick, rich description of the interviews, which allows readers to (a) internally visualize the experiences (as described by Leedy & Ormrod, 2013), (b) transpose to the settings conveyed (as described by Creswell, 2007), and (c) draw conclusions through the data presented. Concurrently, conformability may occur through the same audit, which would allow the data and the identified themes to be backtracked to the original source (Shank, 2006). The process of establishing conformability verified the conclusions I established.

As a methodological approach, triangulation contributes to the validity of research findings. Triangulation, as discussed in Chapter 3, is the process of validating data by cross-verifying the data using two or more sources. The process of triangulation in this study entailed establishing an audit trail (interviewer memos), using a co-rater, and providing for member checking (Mertens, 2105).

According to Vogt (2005), categorizing the data is a process of selecting idiographic themes from the transcripts. Idiographic themes are individual, singular, unique, or concrete points used to determine nomothetic themes (Vogt, 2005).

Reoccurring idiographic themes are renamed nomothetic themes (Vogt, 2005). "Nomothetic themes are general, universal, abstract principles or law" (Vogt, 2005, p. 207). These themes represent the true essence of the participant's experience.

For the data analysis process, I constructed a textural–structural description of the participant meanings and essences of their personal experiences (Moustakas, 1994). I made a conscious attempt during the interpretation of participant subjective findings to remain free of any biases and, therefore, to be able to give an accurate and stable account of the analytic data. Moustakas (1994) warned against asking leading questions that might distort participants' reported experiences. When conducting the interviews, I was careful to avoid interpreting what the participant might want to say as well as to refrain from asking leading questions that would distort the experience in its essence. However, clarification was occasionally needed, which in part was due to disfluent speech on the part of the speaker.

As the interviewing process began, the participant dialogue seemed to take on a momentum of its own, and each woman answered the research questions by recalling the past or current events of her life without hesitation. The participants appeared confident and eager to share sensitive information about aspects of their life experiences to help stimulate public awareness regarding this communication disorder. No participant appeared to be in distress due to recalling experiences that she might have found to be an unpleasant memory. Often, a participant thanked me for conducting this study.

Almost all of the research questions elicited more than one response from the participants, allowing them to share more information about their experiences in the four

life domains. However, some of the participants had no difficulties in a specific domain, and their responses were straightforward. For instance, if a woman did not experience any financial problems, her answer was, "this does not apply to me" or "no" or "none."

## **Key Findings**

The key findings are presented for the research questions in the four life domains studied: social, occupational, academic, and financial.

# Similarities in the Phenomena for Social Experience

RQ1: What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their social interactions, and what positive coping strategies do they use?

Four of 10 participants said stuttering *did not hinder their ability to make friends*; seven of 10 participants said a similar thing for feeling *stressed in social situations*; six of the 10 participants said they experienced problems with *romantic relationships*.

Participant 001 identified primary themes regarding stuttering and how it relates to her social experiences. She recounted having many friends and cultivating friendships through playing sports

I definitely went into sports a lot more when I was younger, and I kind of threw myself onto the sports field, and that's how I made friends . . . . I don't know any other women who stutter . . . . I've met two or three in my life, so I think it's really good that you picked women that stutter for your study . . . (P5, L114). Also friends would kind of would speak for me when I wouldn't want to, so that helped.

Stuttering did cause her to be closed off romantically (P3 L58).

The social life domain for participant 002 did not impair her ability to make friends; she described herself as an outgoing person (P1 L12; P1 L13). However, she recalled her younger years as being worse and causing her stressful social situations (P1 L15). She said romantic relationships were a problem during the first date "I am feeling nervous because of what they are going to think" (P1 L17).

Participant 003 talked about her social experience regarding stuttering. She said stuttering prevented her from going to a social event as well as interacting with others (P1 L10, L11). Additionally, she reported that stuttering affected how she made contact with someone, and she was hard on herself, especially after attending a social event that promotes more stress (P2 L28, L34, L35). Participant 003 said she was a lot harder on herself in social situations than others.

Participant 004 said

I think that my personality has always been pretty good, but with the disfluency I've learned how to make people comfortable around me. I've had to adapt to overcompensate for helping people to like me, to be comfortable. (P1 L24, L25, L26)

She mentioned people were generally nice to her (P1 L17). They made her feel uncomfortable; she was introverted and did not like large groups of people (prior to the age of 10, she was very shy). Participant 004 stated that her

feelings of inadequacy were less about people not liking me and more about me having to prove to myself that I could do this and that [I] wasn't less than everybody else in anyway at all, and it was [stuttering], just out there.

Participant 005 mentioned having a difficult time socially when she was younger because of her stuttering. She said

when I was a little younger it was a little hard because when you're younger, kids judge you; kids make fun of you; and I dealt with this in elementary school so I had a hard time finding friends" (P2 L31, L32, L33)

Participant 005 felt that later on she struggled in romantic situations.

Stuttering prevented participant 006 from going places and saying things to other people; she was fearful and afraid of stuttering (P1 L22, L15). She described the telephone as a fearful experience in terms of being afraid of stuttering while talking on the telephone. When she had a block in her speech, she would hang up the phone (P1 L26).

Participant 007 said "I mean it was frustrating to me, because I felt like I was kind of stuck in this, and nobody quite understood me" (P3 L55). She found stuttering to be frustrating and did not have any confidence (P2 L32; P3 L65).

Participant 008 said

I think socially definitely it makes you kind of feel held back a little bit. It's always hard to meet new people because you just feel like, it is obviously, the barrier of being able to speak to other people. (P4 L68, L69, L70)

Participant 008 stated that she is getting to the point in her life where she accepts her stuttering, but she avoids situations in which she would have to speak in front of a group of people. She described herself as being shy all the time, but sometimes she is able to stand up and say (so to speak), "this is who I am." Participant 008 indicated that getting to this point in her life has definitely taken a lot of work, and she is still not always at that point (P5 L111). Participant 008 went on to say "it's just a little terrifying to always have to put yourself out there" (P5 L119). She felt stuttering interfered with romantic relationships as well (P5 L96).

Participant 009 said

I'm more comfortable now, but I know previously in the past I felt less comfortable meeting new people, so I think that definitely affected my friendships. I think I probably stuck closer to the people that I knew instead of potentially branching out more. I know that was particularly the case in college. I would say after I met my core group of friends my freshman year, they were the people that I really stuck with for the rest of my 4 years. (P1 L20, L24, L35)

She believed stuttering affected romantic relationships in terms of how long they lasted. (P3 L62).

Participant 010 described her social experience as being good. She said
[I] don't think [stuttering] affected my ability to make friends. I was invited to slumber parties a lot. Like at Halloween and slumber parties. I would have like 18 girls over. My mother helped me a lot. (P4 L87)

However, Participant 010 mentioned it was difficult for her romantically, because she could not call a boy on the phone for a hay ride (P5 L98, L102).

## Similarities in the Phenomena for Occupational Experience

RQ2: What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their occupations, and what positive coping strategies have they used?

Six of 10 participants said stuttering caused them to be *fearful of talking on the phone* in a similar way; four of 10 participants emphasize not being able to *speak to a group of people;* four of 10 participants said *no supervisor was rude to them;* and six of 10 participants mentioned their *stuttering interfered with employment.* 

The life domain for occupational experiences did not present any difficulties in employment for participant 001. However, it did cause her to take a lower-paying job because she had to find another way to work in her profession (P7 L136; P7 L147). Another problem she encountered in this domain was having a supervisor that was rude (P9 L184). She said, "supervisors were either impatient or rude all the time" (P9 L187).

Participant 002 was not deterred from applying for a job (P4 L84). Stuttering did prevent her from answering the phone, causing her to be left out of a work-related event. Also, stuttering caused her to be underqualified at a job because, "I had potential to grow with the right mentoring as I thought she was going to be, but she would backlash at me" (P7 L149).

Participant 002 recalled an important theme regarding her employment experience during which an opportunity arose for talking on the phone. She described talking on the

phone as being the "hardest thing," because that is where stuttering comes out the most.

She stated

I got the job but then 2 weeks in, they said, I think you'd be suited better elsewhere, because everyone would be in the room, and I would start stuttering, and I think everyone kind of felt uncomfortable and also maybe, anyway, so then they put me in a different area where my sole job was not cold calling people all of the time.

This participant had another employment encounter during which a boss was a very difficult person to work with. This made her anxious to ask for any time off. She would wait 2 or 3 days, because she did not know what she was going to say (P6 L132; P4 L87).

Participant 003 described stuttering as being a hindrance, because women are expected to speak well (P3 L62, L65). However, regarding employment, stuttering gave her the opportunity to educate employers about stuttering. Stuttering did not keep her from seeking certain jobs. No employer was rude to her because of her stuttering. She reported not wanting a job that required speaking on the phone yet wanting to challenge herself more often for her career (P4 L84, L93, L94, L95). A coping strategy was to be transparent to others (P6 L136). Participant 003 was mocked at work because of her stuttering:

I don't want to say uneducated people are the ones who make fun of me all the time, but it does happen to be that way. (P7 L179)

Participant 004 stated that she "stayed away from jobs where I would have to use the telephone a lot" (P3 L50). She believed disfluency appeared to make her look less professional (P4 L74).

Participant 005 said when she was younger, the interviewing process was difficult because of having to talk to a lot of people throughout the day. She made it through the first round of interviews, but often felt as though she was not going to be asked back for a second interview because of her stuttering. She stated that she felt as though people were giving her weird looks during the interviewing because of her stuttering (P4 L77). She also said stuttering kept her a couple of times from taking a job because of having to speak to a bunch of people and people who did not know her. "It was not something I'd want to put myself through."

Participant 006 asserted that stuttering interfered with her employment status (P5 L112). Stuttering may have stopped the second phone interview from being conducted, because she said would "beat herself up" for stuttering on the phone (P5 L4; P5 L122). She reported being rejected from a few jobs, but this did not stop her from applying for jobs (P6 L142).

Participant 007 discussed her work-related situations and recalled certain things that made her feel uncomfortable in employment settings. She recalled not having any problems because of stuttering, but

back in my early college years, it certainly ruled a lot of stuff out for me. Well, I'm not going to do a job where I have to talk in front of a lot of people who I do not know. Even the telephone back then, back in my college years, the 80s, it was

like . . . answering the phone was a problem. So, I mean, it's not like I ever was told, you can't do that, but it was just something that I found difficult. (P5 L94)

Participant 008 believed the telephone caused problems with employment. She mentioned that her boss spoke with her about the not being able to speak on the phone.

I was answering the phone one time at work at his office, and I totally botched it, just stuttered everywhere. So afterward, we kind of had to talk about it, you know. And he was so cool about it, though. I kind of stop myself, though, from putting myself in positions where I feel like my stuttering will be noticed too much. (P6 L140)

However, no employer was ever rude to her.

Participant 009 said,

I think [stuttering] affected my comfort level, when I needed to meet with parents, and they weren't quite sure I was going to be a good fit for their child because I was stuttering.

[This was a] pivotal point too I guess. It turned into a great experience in that, while I was quite taken back, shocked, it turned into a great experience where I was able to show the parent my skills, and how I was able to help their child (P4 L81).

Participant 009 asserted that in occupational settings, "no employers seem to act differently to me because of my stuttering" (P7 L151).

Participant 010 said in terms of her occupational experience,

I've worked hard hours, I was able to deal with difficult people, and difficult doctors. I did work nights, I worked hours that other people wouldn't work.

She mentioned that there was a work-related situation in which she was paid less than a co-worker for doing the same job because of her stuttering. Participant 010 referred to stuttering as a "southern tax" (P8 L183).

### Similarities in the Phenomena for Academic Experience

RQ3: What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *formal education*, and what positive coping strategies have they used?

Three of the eight participants said they were *mocked* in school in similar fashions; four of four participants mentioned they were *embarrassed by a teacher;* six of eight participants described their school experience as being terrible; four of four participants *self-disclosed their disfluency* as a means to positively cope; seven of 10 participants said they have *a fear of speaking* because of their disfluency; and three out of 10 participants said their stuttering was related to *lack of confidence*.

Participant 001 recalled her academic encounters and mentioned that early school experiences were "dramatic" (P10 L210). She said school was really traumatizing and described this as "watching the clock; 44 minutes; 32 minutes until class was done each period would be class was over" (P10 L209). Other central themes in a classroom setting included feeling fearful of not being able to speak when she was called on to answer a question; leaving her books at home on purpose; making an excuse to go to the restroom; and being mocked, bullied, laughed at, and not feeling worthy enough to speak with

certain children (P11 L210; P 10 L213; P10 L214; P11 L228; P11 L247; P11 L229).

Participant 001 enrolled in college to become a physical therapist, but she was kicked out because of her stutter

I failed the oral comps because of it, so I underwent a lot of stuff with that, and then I went into an intensive clinic out west. That is when things started to change. (P4 L 64)

Participant number 002 described her academic experience as "good" (P8 L168). However, one teacher made her feel more self-conscious about herself, and she described sometimes feeling "as though I was an outsider a little bit" (P8 L175; P9 L190; P9 L193).

Participant 003 asserted her experience academically was good. Some things she mentioned regarding school situations were as follows: she once told a teacher she was uncomfortable and asked not to be called on in class because of her stuttering. "The teacher called on me more; he actually saw it as a challenge" (P7 L165, L166). She did not have any problems because of stuttering in college, and no one made fun of her disfluent speech; but if she was not with friends, she was taunted (P8 L193, L194).

Participant 004 was afraid to raise her hand in school because of her stuttering. I had to do the salutatory address. I stuttered all the way through it in front of everybody, and their moms and dads. So, this was my first experience of doing something like that where I just, I couldn't do it perfectly. You know, here it is! This is the way I speak. (P10 L227)

Participant 005 said, "I was picked on for my stutter in elementary school" (P6 L125). She remembered having a bad experience in a lower school grade, and her mother

advocated for her with the teacher (P7 L155). Later on, she mentioned giving a presentation in class, and the situation with the other students had improved (P6 L129). The class asked questions after the presentation.

According to participant 006, her academic experiences were not that bad. However, she reported being teased and mimicked. Stuttering increased her fear (P8 L182; P8 L179). For example, participant 006 thought avoiding situations to speak was because of beating herself up more for being disfluent as opposed to the listener doing so. She said, "I would have to say there was a lot of fear in middle and high school and some in college, in my early college years. Then just that of me beating myself up; those things I remember" (P10 L234). She described an important school experience:

I avoided the words. I would stutter on, but there was a lot of avoidance for school projects or doing stuff. Then finally ... I did use a coping strategy. I did talk to one of the teachers in high school, because he made us read out loud every day. So, I actually did go talk to him and say, you know, I'm a person who stutters. Could you not call on me? He said okay because if you're doing a round robin or something, I was not paying attention to you or paying attention to any learning. I was paying attention to my fear that I had to speak soon. (P12, L248)

She decided to end the fear of stuttering and "put it out there" that she is a person who stutters.

Participant 007 reported feeling humiliated and embarrassed about stuttering. One experience she recalled occurred during a high school class. Stuttering never really bothered her until high school. A teacher asked her if she was okay during class time with

a group of her peers when she was unable to read fluently. This experience was embarrassing and humiliating and made her self-conscious about stuttering (P9 L181). She discussed how having confidence makes a difference in stuttering (P11 L227).

Participant 008 hated school and claimed to have struggled through it (P8 L193). She recalled acting like she was sick to avoid school, making herself physically ill, and feeling fearful of academia (P8 L195; P9 L206). A vivid memory she recalled was during a classroom event. She said,

one of those pop-up readings, you know, which is like torture for someone who stutters, and I could not start. In the middle of the class, the teacher goes, are you okay? Is there something wrong with you? So, that is really when I became self-conscious. (P9 L180)

Participant 009 asserted that clinical supervisors may have had a level of discomfort because of her stuttering (P6 L123). She said

stuttering affected learning interactions with peers in academic settings. Not so much in elementary school, but starting in junior high when I became more aware, more self-conscious, feeling uncomfortable giving the class presentation, over time not always feeling comfortable asking questions in class. I would say it wasn't until college when I started to actually try to self-advocate. Don't think it was until my junior year of college I know I went to a professor because I know part of the grade was going to be based on my participation. I just told him, I stutter. I typically don't feel comfortable participating in class. (P7 L70)

Participant 010 reported having a good experience (P1 L14) in school. Teachers were supportive (P1 L46). She recalled, "winning a public speaking contest in the district" (P3 L55). She mentioned "the hardest thing was not being able to say her name during roll call in school" (P2L 28, L29). Overall, she said her peers were supportive.

# Similarities in the Phenomena for Financial Experience

RQ4: What are the perceptions and experiences of adult women who stutter regarding the stressors on their financial matters, and what positive coping strategies have they used?

Seven of 10 participants said they *did not have any financial problems*; two of 10 participants said in a similar manner they *could make more money but they choose jobs* they were less qualified for or that were stressful; seven of 10 participants asserted health care does not cover fluency therapy; and two of 10 participants reported *support with living conditions*.

Participant 001 denied having any financial problems (P14 L308). She was able to afford healthcare insurance, but mentioned her speech therapy was not covered under her insurance policy (P15 L317). She obtained assistance with fluency training by making connections with other people. A positive coping strategy she uses is not comparing herself to fluent people (P17 L370).

Participant 002 declared not having any problems financially because she has her own business (P11 L233, L234). Her HMO insurance did not pay for her fluency therapy, so she monitored her money (P11 L247, L248).

Participant 003 reported her financial experience as being good. She also noted that speech therapy is not something covered under her health care insurance. Participant 003 was fortunate enough to be able to negotiate with her an employer to pay a certain percentage of her fluency training cost to able to afford speech therapy (P9 L238; P10 L243, L246, L249, L250).

Participant 004 did not disclose having any problems financially problems at this point in her life.

Participant 005 reported her financial experiences as "being good." However, her insurance did not cover speech therapy, and she had to pay out of pocket for fluency training for a period of time (P11 L232).

Participant 006 echoed the central theme of having a financial burden because insurance does not cover speech therapy (P13 L313).

Participant 007 did not disclose having any financial difficulties.

Participant 008 asserted she could make more money. She discussed how stuttering affected applying for a job and said "interviews in the past were bad for her" (P12 L294, L297). She described how healthcare insurance to cover speech is a problem (P11 L276).

Participant 009 did not report having any financial problems because of her stuttering.

Participant 010 discussed her financial situation being a woman who stutters. She stated

some people think you make a million dollars being a pharmacist, but it is one of the higher paying jobs for women . . . . I was very lucky. I've retired, and I've got Social Security. So, I've got a pension. I saved in a 401K, so I'm very lucky as a woman and a person who stutters . . . . I don't know any other women who stutter, so I think it's really good. I've met two or three in my life, so I think it's really good that you picked women that stutter for your study. (P5, L114)

### Positive Coping Strategies for 10 Participants in Four Life Domains

Participants cited a variety of coping strategies. A positive coping strategy for participant 001 was using stuttering techniques and playing sports (P2 L26; P5 L96). As an adult, a coping strategy participant 008 endorsed was to confront her fears. Participant 003 said she was "learning how to cope with stuttering in terms of how I feel when I impact people socially (P2 L43, L51, L54, L55)." Participant 002 said some positive coping strategies included knowing people overlook her stuttering; acknowledging everyone has something to deal with; and having speech therapy (P2 L28; P2 L39; P3 L53; P3L60).

Five of 10 participants used fluency training techniques as a positive coping strategy. Participant 003 said she used speech therapy to improve her social experiences;

[I was] a lot harder on myself in social situations than others. I don't feel bad anymore because going through speech therapy has helped me target my speech issues.

Many participants expressed that self-disclosure was their positive coping strategy. Participant 004 said, "A positive coping strategy is advocating for myself and

educating other people about stuttering." A positive coping strategy for participant 005 was learning to self-disclose her stuttering by "put her stuttering out there" (P10 L210). A positive coping strategy participant 006 said she used was "I just put it (stuttering), out there" (P2 L46). Participant 008 defined a positive coping strategy she uses to deal with stuttering such as learning to be open and saying "hey, this is a part of me" (P12 L299). A positive coping strategy for participant 005 is saying to people "I stutter; take it or leave it" (P6 L120). Participant 005's positive coping strategy was educating other people about stuttering: "letting people know I stutter by telling them and just talking despite having disfluency" (P10 L198).

Other participants had different coping strategies. Two of 10 participants combined their *life experience, education, and well-being* to positively cope with their stuttering. A positive coping strategy for participant 007 was to be motivated as a mom for her kids to be successful (P4 L85). A coping strategy participant 008 mentioned was being positive, because this helps her speech to flow better. A positive coping strategy participant 001 used was becoming tough skinned. Participant 007 said "a positive coping strategy is education, and knowing self-limits" (P12 L263, L294). Participant 009 said a coping strategy she uses is "focusing on her strengths."

#### Summary

In summary, the participants' answers to the research questions supported what has been reported in the literature on stuttering regarding the pain and suffering people who stutter endure socially, occupationally, academically, and financially. I focused exclusively on the personal experience of women who stutter in four life domains and the

positive coping strategies they used to manage their disfluency. The research questions for this study were structured so the reader could capture a picture of what the participants encountered in four domains of life on a daily basis. The high-quality pieces of information obtained in this study will serve as a valuable guide for qualitative researchers, whatever their range of expertise may be. Concomitantly, the rich account of subjectivity obtained from the participants in my study will provide insight and understanding for women who stutter by those who misunderstand the disfluent speaker from all walks of life.

#### Chapter 5: Discussion, Conclusions, and Recommendations

#### Introduction

I conducted my phenomenological study to explore the problems women who stutter encounter socially, occupationally, academically, and financially, as well as to identify the positive coping strategies they use. In Chapter 5, I included analytic interpretations of the data compared with the literature. The sections are as follows: introduction, interpretation of the findings, implications, limitations of the study, recommendations for further study, and a conclusion.

Stuttering is a chronic communication disorder that interferes with a person's quality of life in terms of emotional, social, and mental health functioning (Craig, Blumgart, & Tran 2009). A stuttering disorder from the speakers' perceptive involves shame and embarrassment, leading to people who stutter to develop self-limitations by impairing their ability to be an integral part of society (Yaruss & Quesal, 2004). Environmental and personal restrictions affect stutterers' overall well-being by interfering with how they participate in most daily activities. Recent researchers have sought to investigate the diminished quality of life for adults who stutter (Klompas & Ross, 2004; Yaruss & Quesal, 2006). This qualitative study determined similarities in the character-like hardships that women who stutter face and how they used positive coping strategies to deal with the everyday challenges.

Previous studies have focused on people who stutter, but few studies focused on women exclusively, which may be due to the ratio of men to women being higher (Bloodstein, 1995). My study helped fill a gap in the literature by addressing the

experiences of women who stutter in four life domains and the positive coping strategies they use.

# **Summary of Key Findings**

The key findings for this study emerged from the phenomenological research questions developed to understand the subjective experiences of women who stutter in four life domains and how they positively cope with their disfluency. The topics from the interviews came from the following research questions:

- 1. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *social interactions*, and what positive coping strategies have they used?
- 2. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *occupations*, and what positive coping strategies have they used?
- 3. What are the perceptions and experiences of adult women who stutter regarding the stressors of stuttering on their *formal education*, and what positive coping strategies have they used?
- 4. What are the perceptions and experiences of adult women who stutter regarding the stressors on their *financial matters*, and what positive coping strategies have they used?

### **Interpretation of the Findings Social Experiences**

This study confirmed similarities regarding the social experiences for women who stutter and what has been previously reported in the literature. Women who stutter

experienced a state of mind of being held back socially or being undesirable in societal settings (Iverach et al., 2009). Other nomothetic themes that emerged included feeling awkward or stressed related to social anxiety because of stuttering (Blumgart et al., 2010b; Yaruss & Quesal, 2006).

Another theme from this study was the technique of avoidance to escape speaking to individuals or groups of people because of being disfluent. The literature provided many examples of people who stutter using avoidance to circumvent speaking to other people (Betz et al., 2008; Franc, Bothe, & Bramlett, 2012; Maguire et al., 2012; McAllister et al., 2012; Von Tiling, 2011).

Romantically, participants felt embarrassed and acknowledged how stuttering interferes with romantic relationships. Concomitantly, the women in this study revealed being nervous the first time meeting a man. Van Borsel et al. (2011) endorsed the effect that stuttering has on affairs of the heart.

### **Academic Experiences**

Participants in this study recalled being mocked, mimicked, and embarrassed by teachers. They were frustrated, self-conscious, humiliated, anxious, and fearful of speaking in class. Participants recalled having a speech block, being afraid of raising their hands, lacking confidence in school, and not being able to learn in a classroom environment because of the fear associated with stuttering. Not surprisingly, research has suggested stuttering interferes with a person who stutters' ability to learn, invites bullying, may result in being socially ostracized by a group of one's peers, and

contributes to having negative school experiences (Gabel et al., 2004; Klompas & Ross, 2004; McAllister et al., 2012; O'Brian et al., 2011).

# Occupational and Financial Experiences

Women who stutter reported using fluency training and self-help treatments to cope with their stuttering in the workforce. Similarly, Blumgart et al. (2010a) suggested using fluency training or self-help treatment in employment settings. Another method women who stutter use is to self-disclose their stuttering and to self-advocate as a means of managing their disfluency in social, financial, occupational, or academic environments.

McAllister et al. (2012) discussed financial problems and academic difficulties viewed as mutual themes regarding negative consequences of stuttering such as low self-esteem, embarrassment, frustration, and anxiety. The current study found that stuttering variably interfered with employment in terms of being discriminated against by being paid a lower wage, dismissed from a job, or being placed in another work area because of stuttering. Gabel et al. (2004) and Klompas and Ross (2004) found similar aspects of occupational hazards for people who stutter.

## **Theoretical Orientation: Positive Psychology**

This phenomenological study used the Schueller and Seligman (2000) conceptual framework of positive psychology to understand the personal experiences of women who stutter and how they positively manage their stuttering. Positive psychology was used to investigate the coping strategies participants used as they experienced the phenomena in this study. This study confirmed aspects regarding how these woman found a way to

empower themselves by using positivity in their lives. From this study, all of the women developed the ability to function in society, as well as how to make good lives for themselves despite the adversity they faced enduring the chronic stress associated with stuttering.

# **Implications**

These women were subjected to embarrassing situations because of their stuttering. The results of this study will educate the public about women who stutter. A key element in the study is using education as a preventive measure to stop further harm from being inflicted on women who stutter.

Stuttering is a disability that cannot be visually seen and is only detected in people when they speak. Therefore, people may form preconceived notions or misconceptions about the speaker, viewing the speech disorder as a psychological condition. People with visible disabilities are usually identifiable by their physical conditions or devices that are easily seen. People who stutter are at a disadvantage, because no aids or devices identify them as someone who is disabled. Therefore, they are discriminated against, made fun of, or ridiculed because of their disfluency.

Moving forward, prevention in the form of education can be achieved by teaching speech–language pathologists, doctors, health care workers, families, community groups, lay people, and students about the hardships women who stutter endure in four life domains.

## **Limitations of the Study**

A limitation of this study is it cannot be generalized, because a limited sample group cannot represent all of the population for people who stutter. More research needs to be done with women who stutter. More differences in the experiences may exist between men and women than those found in this study. Another limitation is the small number of participants and the nature of the interviews that were relatively short in some circumstances. All of the interviews were conducted in the greater Wheeling, West Virginia, area. It is possible that the Wheeling, West Virginia, area is unique in a way that could have biased in this study. Other limitations include the study being conducted with 90% White women. Finally, the findings could be applied only to women.

#### Recommendations

More studies need to be conducted on the life experiences of women who stutter in four domains of life. Another suggestion is for future studies to focus on positive coping strategies that women who stutter engage in to enhance their quality of life.

### Conclusion

Stuttering is a chronic condition that has an unknown etiology. In an attempt to remain fluent, the woman who stutters experiences daily stress, which causes her to endure pain and suffering in four life domains. Little qualitative research has addressed women who stutter. Only recently has research been conducted on the quality of life of people who stutter (Klompas & Ross, 2004). Yaruss and Quesal (2006) developed the OASES—a scale to measure speakers' quality of life. Studies such as these made it

possible to develop a deeper understanding of the hardships people who stutter undergo in daily life situations.

This phenomenological research was based on the experience of 10 participants, and therefore does not represent all women who stutter globally. This study, however, can aid in better understanding women who stutter and their life experiences with people, places, and things. Mental health practitioners, speech—language pathologists, educators, parents, families, doctors, lawyers, and lay people can gain a better understanding of women who stutter. The insight gained by this study is aimed at describing typical encounters as well as highlighting positive coping strategies to overcome obstacles for women who stutter despite the challenges they face maintaining relationships and friendships, finding jobs, and achieving financial and academic goals to survive in life. The study aimed to reveal the many positive aspects of the stuttering journey that led to personal growth and development for women who stutter throughout the life cycle.

Finally, this study can assist people in general to view women who stutter in a positive manner instead of with stereotypes and prejudice. Readers can learn from these courageous women who were willing to share their life experiences for this study. These women can be regarded as individuals who want to help others because of what they have endured as people who stutter. Furthermore, they should be known as pioneers because of leading the way to help others who suffer from disfluency. The motivation behind this study therefore goes beyond supporting women who stutter, because it delves into the deeper levels of the human psyche to promote learning for social change.

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## Appendix A: Interview Questions

- 1. How has stuttering affected your interactions in various social situations? What kind of social experiences have you had because of your stuttering? How has it affected your ability to make friends, or has stuttering interfered with romantic relationships? How has it made you feel awkward in a crowd of people?
- 2. How has stuttering affected your academic attainment? If so, has it affected your learning interactions with peers in educational settings? What types of reactions have your experienced from educators or peers? At what level of education did your experiences these reactions?
- 3. How has stuttering affected your financial well-being? If so, have you experienced financial problems because of stuttering? Has it caused you financial hardship because of lack of employment, placed a strain on you because of the cost for speech therapy, or impaired your ability to meet basic survival needs as well as live below a certain socioeconomic standard? Have you experienced any financial benefit because of your stuttering?
- 4. How has stuttering caused you problems with employment? Has it cost you a job, or promotion, or made you take a lower paying job? Have you ever been given an opportunity in employment because of your stuttering?