COMPETITIVE EMPLOYMENT AND AUTISM SPECTRUM DISORDER: EMPLOYER PERSPECTIVES

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

DOCTOR OF EDUCATION

BY

WANIETTA C. STUCKEY

DISSERTATION ADVISOR: DR. SUSAN WILCZYNSKI

BALL STATE UNIVERSITY

MUNCIE, INDIANA

MAY 2016

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APPROVED BY:

_____	_____
Committee Chairperson	Date
_____	_____
Committee Member	Date
_____	_____
Committee Member	Date
_____	_____
Committee Member	Date
_____	_____
Dean of Graduate School	Date

BALL STATE UNIVERSITY
MUNCIE INDIANA
MAY 2016

ABSTRACT

DISSERTATION: Competitive employment and autism spectrum disorder: Employers perspectives

STUDENT: Wanietta C. Stuckey

DEGREE: Doctor of Education

COLLEGE: Special Education

DATE: May 2016

PAGES: 123

Competitive employment for individuals with Autism Spectrum Disorder (ASD) is important because this group is described as the most employable, yet least employed. Historically, females have been more likely to hire/work with individuals with disabilities than males but the gap between the sexes has been closing. A survey focusing on work qualities was sent to business executives across the United States. Survey topics were familiarity with ASD and qualities thought to be important for employees. Despite the fact that female business executives reported being more familiar with ASD than males, few differences about their views regarding people with ASD emerged. Female business executives reported that believed individuals with ASD held the work characteristic of "focus," or the ability to sustain attention. In contrast, males were split on this characteristic. Future directions in research and employment programs for individuals with ASD were discussed.

DEDICATION

I dedicate this dissertation to my husband, Don, my boys, Christopher and Corey, my sisters, Dodie and April, and my Father. You gave me everything I needed in order to start and finish this journey. It was through your encouragement that I was able to persevere. I also dedicate this dissertation to my dearest of friends, Kristi, Teresa, and Theresa. I have been able to lean on you and get the encouragement that I needed when I needed it. I don't know where I would be without each and every one of you.

ACKNOWLEDGEMENTS

I am grateful for the guidance of my committee chairwoman Dr. Susan Wilczynski for her guidance and patience through this dissertation process. Her understanding through some tumultuous times as well as insertion of laughter when it was needed was always welcome. Thank you to Dr. Michael Goldsby, my cognate advisor, whose insight into the business world and the importance of this research allowed me to think outside of the box. I appreciate his questioning strategies that guided me to think more globally. To Dr. David McIntosh, I am grateful for his guidance in ways to simplify and reword my work while gaining even more insight. His discussion helped to me to see the value in what I already knew and the knowledge I was gaining.

I am blessed to have such a supportive family. My husband, Don, has waited patiently since I got my acceptance letter, through each stage, and now as I finish. He is an amazing partner who did everything in his power to make life easier for me. He is my rock. I will forever be grateful for his love, understanding, and support. To my father, the one who truly made me see the importance of continuing my dreams. I thank him for his hand in who I have become. I am truly blessed. To Dodie, my sister, my deepest gratitude for showing me that it's never too late to start a career. Without her lead to follow I probably wouldn't have started this journey.

To my oldest and dearest friend Kristi –She is an inspiration to me! To my dearest friends Teresa and Theresa who helped me by being so positive, and supportive. These two are true supporters.

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Chapter 1

Problem Statement

Employment statistics in the United States (US) have been rebounding since the downturn and recession of 2008; with the unemployment rate reaching a high of 10%[1] and gradually decreasing over the subsequent seven years. Unemployment rates for the United States were shocking at rates of 9.3% in 2010, 9.6% in 2011, 8.9% in 2012, 8.1 in 2013, 7.4 in 2014, and 4.9 as of March 2016 ("United States Bureau of Labor Statistics," 2016; US BLS, 2011). Even though the unemployment rate for the United States was 4.9% as of March 2016 ("US BLS," 2016), some sub-groups experience higher rates of unemployment. For example, veterans known as Gulf War-era II veterans had an unemployment rate of 9.0% in 2013 and 7.2% for 2014, Black or African Americans ages 20 years and older had an unemployment rate of 11.1% in September 2014 and 9.2% September 2015, individuals who did not have a high school diploma had an unemployment rate of 8.3% in September 2014 and 7.9% in September 2015, and 18-19 year old individuals rate of unemployment in September 2014 was 19.9% and 15.9% as of September 2015, according to the Bureau of Labor Statistics web-site (http://www.bls.gov/cps/cpsaat03.htm). Yet the unemployment rate for individuals with disabilities is even greater with the most recent data showing it at 71% in 2010, 73% in 2011, 73.2% in 2012, and 66.1% in 2013 (Bureau of Labor Statistics "US BLS, 2016; National Institute on Disability and Rehabilitation Research [NIDRR], 2012; National Institute on

[1] The highest unemployment rate ever recorded for the United States was 10.3% in 1983. The current average unemployment rate for the United States is 4.9% (United States Bureau of Labor and Statistics, 2016).

Disability and Rehabilitation Research [NIDRR], 2015)[2]. The National Institute on Disability and Rehabilitation categorizes some disability groups; however, the group of individuals with autism spectrum disorders (ASD) is not yet a group of distinction within the data. According to the 2012 Annual Disability Statistics Compendium (National Institute on Disability and Rehabilitation Research [NIDRR], 2012), a mere 27% of individuals with a disability between the ages of 18-64 were employed during 2011 and increased slightly to 33.9% in 2013. The earnings from employment for individuals with disabilities in 2013 netted them an average annual salary of $20,785, which was 32% less than non-disabled workers. The current 33.9% of individuals who are employed includes all disability groups without delineating those with ASD. The low employment rates of individuals with ASD are at 17.7% (Butterworth et al., 2015, p. 40). According to the State Data: The National Report on Employment Services and Outcomes (2011), individuals with ASD accounted for 1.6% of the individuals leaving Vocational Rehabilitation (VR) services with their disability being the primary or secondary reason for non-employment. Individuals with ASD are likely to be unemployed or underemployed, with 57% of individuals with ASD having poor to very poor outcomes with employment (Dew & Alan, 2007).

From 1982 – 2010 the unemployment rate in the United States remained fairly steady at 6% with the exception of 2008 when it jumped to 10.0% (United States Bureau of Labor and Statistics [US BLS], 2011). After the peak unemployment rate of 10%, the economy has made steady gains and is currently at 4.9%. Although the unemployment rate has improved overall, many subgroups continue to experience elevated levels of unemployment, including the

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[2] Bureau of Labor Statistics http://www.bls.gov/news.release/disabl.nr0.htm.

disability population. As a result, the candidate that makes the strongest initial impression during a one on one interview will more likely be hired while all others will be turned away (Barrick, Swider, & Stewart, 2010; Imada & Hakel, 1977; McShane, 1993). The determination of whether or not to hire a candidate is decided during the unstructured portion or the "getting to know you" portion of the job interview (Barrick et al. 2010), and the first few minutes of the job interview are most important because this is the time that the interviewer is able to use non-verbal communication from the interviewee to deduce if they are the right candidate for the job (McShane, 1993). According to Barrick et al. (2010) a simple handshake or smile during the initial greeting during an interview will predict employment. If the interviewer decides that the candidate is competent through the initial greeting portion of the interview, they are more likely to hire them. Competition in the job market forces all individuals to put forth their best effort and demonstrate the qualities that would make them the best candidate for the position. As the unemployment rate decreases and more and more persons are being hired, individuals with disabilities, including those with ASD, should be better able to gain competitive earnings as well.

Competitive[3] wages are earned through competitive employment. According to 34 CFR 361.5 (b) (11) [Title 34 – Education; Subtitle B -- Regulations of the Offices of the Department of Education; Chapter III -- Office of Special Education and Rehabilitative Services, Department of Education; Part 361 -- State Vocational Rehabilitation Services Program; Subpart A –

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[3] Competitive work in integrated work settings…for individuals with the most significant disabilities for whom competitive employment has not traditionally occurred: or for whom competitive employment has been interrupted or intermittent as a result of a significant disability; and who, because of the nature and severity of their disability, need intensive supported employment services…in order to perform such work(Garcia-Iriarte, Balcazar, & Taylor-Ritzler, 2007, p. 130)

General, Competitive employment means "work (1) In the competitive labor market that is performed on a full-time or part-time basis in an integrated setting; and (2) For which an individual is compensated at or above the minimum wage, but not less than the customary wage and level of benefits paid by the employer for the same or similar work performed by individuals who are not disabled."

Currently, individuals with ASD are the disability group that is the least likely to be hired in competitive employment (Lawer, Brusilovskiy, Salzer, & Mandell, 2009; McDonough & Revell, 2010, Shandra & Hogan, 2008). A substantial subset of this population has the cognitive ability to be competitively employed (Dew & Alan, 2007), yet acquiring or retaining competitive employment remains problematic. The problem of individuals with ASD failing to obtain and retain competitive employment is the focus of this dissertation.

The prevalence of ASD has increased by 78% from 2002 – 2008 (Center for Disease Control and Prevention [CDC], 2012). According to the CDC, in 2002 the prevalence for ASD was one in 150, in 2006 the prevalence was one in 110, in 2008 it was determined to be one in 88, and in 2010 it had reached one in 68[4]. A substantial number of this growing population will receive Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI) as a result of employment challenges. In fact, some individuals with ASD are fearful of losing their government assistance from SSI or SSDI and may choose not to seek competitive employment as a result (Berry, 2000; O'Day, 1999; Rosenheck et al., 2006). Gaining competitive employment has the potential to lower the amount of government assistance provided to people on the

[4] The prevalence for individuals with ASD is based on information gathered on children at eight years of age exhibiting characteristics of ASD and does not include adults (Center for Disease Control and Prevention [CDC], 2012).

spectrum because their income would increase. Given the low rate of retention with competitive employment for the ASD population, this is not an unreasonable choice to make. Yet, if individuals with ASD were to enter a competitive employment status, they may no longer require government assistance altogether (Berry, 2000; O'Day, 1999; Rosenheck et al., 2006). For these reasons alone, there is a great need to determine ways that individuals with ASD can successfully gain competitive employment.

Being competitively employed is not unattainable for individuals with ASD. Actually, individuals with ASD tend to follow procedures accurately when completing a specific job and could be ideal employees in areas that focus on preciseness (Lee & Carter, 2012). Helping individuals with ASD become competitively employed is considered a priority by the US Legislature. As a perceived remedy to assisting with employment, the Americans with Disabilities Act (ADA) guarantees support for individuals with disabilities by protecting them against discrimination. The goal was to increase employment by guaranteeing protection, yet the statistics show that this outcome is not yet being achieved. Higher employment rates will not occur through legislation alone. Professionals supporting individuals with ASD in gaining competitive employment must understand the views and needs of employers who are in a position to hire. Knowing in advance what employers want is essential to gaining competitive employment.

There is limited information in the literature depicting what employers would recommend to individuals with ASD to help them gain competitive employment. Speed, work quality, and independence of the individual can be problematic for individuals with ASD (Kregel, 1999). Yet, individuals with ASD have been described as being committed and dedicated to their jobs, which can result in positive evaluations. Employment for individuals with ASD in the area in

which they demonstrate strengths (e.g., a highly focused interest) works both in their favor and that of the employer (Rogers, Lavin, Tran, Gantenbein, & Sharpe, 2008), but employment is dependent on interviewing well. There is abundant research identifying characteristics that should be demonstrated by anyone during the hiring process, including the personal interview. One of the most important set of characteristics to demonstrate in the interview is appropriate non-verbal communication (Einhorn, 1981; Galassi & Galassi, 1978; Hakel & Schuh, 1971; Hollandsworth, Kazelskis, Stevens, & Dressel, 1979; Imada & Hakel, 1977). Another important area discussed in the literature is the level of training that is required to help individuals with disabilities to become successful within the work environment. However, this literature focuses on the general disability population and not specifically those with ASD (Kregel, 1999; Smith, Webber, Graffam, & Wilson, 2004). One source of training that is offered is through VR programs offered through the Family and Social Services Administration (FSSA) offices. The purpose of VR is to train and place individuals with disabilities in the workforce (Chappel & Somers, 2010; Luecking, 2008; McDonough & Revell, 2010; Schaller & Yang, 2005).

The literature also discusses the way a person may feel about working with an individual with a disability. Specifically, sex differences have been shown to impact views about hiring individuals with disabilities. According to the limited literature, the hiring of individuals with disabilities is more likely to occur when there is a female in the position to hire (Jones & Stone, 1995). Females may be more likely to hire individuals with disabilities because they seek to make a positive impression on those around them (Thomas, Vaughn and Doyle, 2007). Further, females are more likely to have positive attitudes toward persons with disabilities (e.g., mental illness) than their male counterparts (Hampton & Sharp, 2014; Laws & Kelly, 2005). Adult males regard persons with disabilities more negatively meaning they were more likely to react

with rejection, anger, irritation, disgust, and consternation than adult females (Werner & Davidson, 2004). This view appears to be somewhat stable across the lifespan as male children hold similar views (Laws & Kelly, 2005). This is not surprising because children's regard for others directly relates to how they regard the same groups of people (e.g., individuals with disabilities) when they become adults (Laws & Kelly, 2005). Females are less likely to distance themselves from persons with disabilities than males (Vilchinsky, Werner, & Findler, 2010). Females do have fewer feelings of rejection toward persons with disabilities than males and they are more likely to accept individuals with a disability (Werner and Davidson, 2004). Females express emotions that are thought to be more prosocial than their male counterparts, which could account for the higher acceptability of persons with disabilities by females (Werner & Davidson, 2004). However, research is beginning to show that the differences between male and females with regard to attitudes toward persons with disabilities are getting closer (Hampton & Sharp, 2014).

Purpose of the Study

The purpose of this study is to determine how to assist individuals with ASD in gaining competitive employment by examining the views of professionals in a position to hire in their organizations. In order to increase the number of individuals with ASD in competitive employment, programs that train these individuals need to understand what employers are seeking in an employee. Knowing what employers are looking for in an employee during the hiring process, as well as their views of ASD, will help trainers to better prepare the individual with ASD for competitive employment. In addition, if existing literature regarding the relationship between the sexes and views about hiring individuals with ASD are confirmed,

individuals with ASD may seek employment in establishments with female executives in a position to hire.

Significance of the Study

This study is important because the low rate of employment for persons with ASD has significant personal, familial, and societal costs. This study has the potential to indirectly lead to improved employment outcomes for individuals with ASD, by informing programs that train individuals with ASD about the perspective of potential employers. Further, if female executives are more likely to hold favorable views about individuals with ASD, vocational rehabilitation programs designed to increase employment for individuals with disabilities may first seek to partner with employment settings in which many women serve as executives.

Research Questions

Barriers to employment for individuals with ASD have been offered in the research literature. There is also some research on the stereotypical reasons that persons with ASD do not gain and retain competitive employment. This study goes straight to the source of hiring in the job market and gets information to assist in helping individuals with ASD in obtaining and retaining competitive employment by speaking with employers. The following research questions will be addressed in this study.

Research Questions #1: Familiarity

a. Do business executives self-report significant familiarity with characteristics of individuals with ASD?
b. Are female executives more familiar with characteristics of ASD than male executives?

c. Do business executives who self-report lower levels of familiarity with ASD identify fewer favorable work qualities among individuals with ASD?

Research Questions #2: Qualities

a. To what extent do female and male business executives rate preferred qualities as important in prospective employees?
b. Do the ratings of preferred prospective employee qualities vary across the sexes?
c. Do business executives believe that individuals with ASD exhibit positive work qualities?

Chapter 2

Literature Review

In this chapter, the literature review will encompass the subject of competitive employment and how this relates to the ASD population. First I offer a brief discussion of characteristics that are frequently associated with individuals with ASD and how they relate to what employers are seeking in workers. Second, I provide a discussion of some barriers to employment and emphasize those specifically faced by individuals with ASD. Third, I review the training that is needed for individuals to secure employment and how it may differ for adolescents and adults with ASD. Better understanding of barriers to employment for the ASD population can lead to the development of training programs that enhance the job prospects of the individual with ASD, which in turn can effectively improve competitive employment rates. . Lastly, I examine issues related to transitioning to employment; steps of employment seeking, vocational rehabilitation, supported employment, and competitive employment are examined in general and then related to the ASD population.

Individuals with ASD are a group of individuals that struggle to obtain and retain competitive employment; yet legislation has been developed to assist in this area. What then causes these individuals to face such low rates of competitive employment? This proposed dissertation will attempt to answer that question by probing into employment and hiring practices in the United States.

Characteristics of ASD

Only a minority of individuals with ASD are able to work and live independently due to barriers that are likely a part of ASD (Hendricks, 2010). The literature identifies employment

barriers that are both universal and unique to persons with ASD due to typical symptom presentation. Symptom severity varies considerably across individuals with ASD, demonstrating the heterogeneity of the population. In fact, the symptoms may even change significantly for an individual on the spectrum depending on unique environmental conditions, which has direct implications for employment. A strict definition of ASD is problematic as individuals exhibit a range of symptoms over the course of their development (Volkmar, Paul, Klin, & Cohen, 2005). The two general characteristics of ASD are: impaired social-communication interaction, and restricted repetitive and stereotypical behavior. The DSM-5 now combines the social and communication domains because these variables are intertwined. That is, communication always occurs with a social partner and to have a social interaction with another person, verbal or nonverbal communication is necessary. However, I review these consecutively in this dissertation to ensure adequate emphasis is given to behaviors that have historically been more associated with social interaction or communication. This also allows for a detailed review of specific social-communication behaviors that the interviewer may interpret as "the factor" that served as a barrier to employment. For example, interviewers may view "communication" as a relative strength because the individual with ASD speaks in complete sentences, but still fail to hire due to discomfort with a socially intense response (e.g., "There is NO WAY I would do that at work).

Impaired social interaction includes lack of eye contact, avoidance of social interactions, non-initiated social interaction and/or unreciprocated social interaction, lack of peer relationships, lack of reciprocity in social or emotional ways, awareness of others is impaired, being oblivious to social norms, anxiety over activity, or impulsivity, self-injurious behavior, insistence on sameness, and/or lack of interest in peers (American Psychiatric Association, 2013;

Volkmar, Paul, Klin, & Cohen, 2005). The area of communication impairments is demonstrated as lack of verbal skills, inability to initiate dialogue, use of repetitive language, abnormal pitch or rhythm to language (monotone), inability to comprehend simple directions, lack of facial expression, lack of non-verbal communication, improper use of hand gestures, and/or inability to understand humor (American Psychiatric Association, 2013; Volkmar, Paul, Klin, & Cohen, 2005). The repetitive and stereotypical patterns of behavior can be described as an interest that causes them to be preoccupied, inflexibleness, repetitive motor movements such as hand flapping, finger clicking, rocking, swaying, or walking on tip toe, being preoccupied with parts of objects, shows an interest in dates or numbers, the inability to deal with change, insistence on following routines, fascination with spinning objects, overly attached to a piece of string or ribbon, difficulty with transitions, perseverative interests, excessive smelling or touching of objects, and/or indifference to pain/temperature (American Psychiatric Association, 2013). These two general characteristics are virtually the barriers to employment for persons with ASD; however, it is important to remember the presentation of these characteristics are likely to vary significantly across members of the ASD population and is also likely to differ considerably for the same person depending on the environmental supports and structure that is available to them.

Psychology of Hiring

Psychology of Hiring in the Genera Population

Employers have different preferences for hiring candidates based on the position being filled. Some employers focus on the qualifications they expect in a new hire. Employers often prefer to hire candidates with college degrees and whose majors are business, engineering, accounting and computer science (Bidwell, 2014). About one-third of employers believe the college a prospective employee attends influences the quality of the workforce (Willis & Taylor,

1999). However, soft skills such as problem solving, ability to plan, organize and prioritize work, analyze quantitative data, and decision making are also sought in prospective employees. Yet, employers do not want to hire employees that are overqualified due to the cost involved. The hiring of an individual is based on finding the right person who best fits the requirements and culture of a given job (Chamorro-Premuzic & Steinmetz, 2013). The individual in the position to hire also considers personal characteristics such as honesty, reliability, trustworthiness, integrity, conscientiousness, interest in the job, and the "right" personality (Bartram, 2004; Charles & Waterworth, 2011; Matejkovic & Matejkovic, 2006). The reason employers may wish to focus on these characteristics is altering these qualities is more challenging than developing job-related skills. Some positions (e.g., reference librarians), place great emphasis on customer service related (Saunders, 2012). Having good interpersonal skills is generally important in most fields. Employers prefer that prospective employees can knowledgeably answer content questions, but also have the ability to build a rapport (Saunders, 2012).

Having access to job information is important and may cause the employee (if they are familiar with the job and the possible stigma of the job) to keep the job longer and have less turnover because they have a more realistic idea of what the job entails (Lopina, Rogelberg, & Howell, 2012). For this reason, employers may attempt to allow access to job information available prior to employment so that prospective employees will have a more realistic idea of the job they are applying to and understand what is expected of them if they are hired.

Employers are likely to focus on both ability and effort. Potential employers may be sympathetic a prospective employee does not demonstrate the ability to accomplish an assigned task, particularly when factors beyond their control explain the poorer performance. If the same

prospective employee does not demonstrate effort, they will be seen negatively by the potential employer because effort is controlled by the individual (Charles & Waterworth, 2011).

Factors that are not directly related to the employee may also be relevant in the job hiring process. Employers may manipulate job postings to limit the number of applicants when job vacancies must be filled quickly (Devaro, 2005). Level of pay is also a consideration when hiring employees. For example, employers may offer lower wages to an individual that is moving from foreign firms to domestic firms and as long as the individual is willing to take the cut in pay (which occurs often). In this way, the employer can fill the position while saving the organization money (Martins, 2011).

Psychology of Hiring Individuals with Disabilities

The psychology of hiring individuals with disabilities has been researched but there are no data regarding the hiring specifically of individuals with autism spectrum disorder (ASD). Studies have focused on lack of employment, low employment, and/or underemployment of individuals with disabilities. Though employers report a willingness to hire individuals with disabilities, the number actually hired is significantly low (Hernandez et al., 2000). Some of the most frequently cited reasons for the low number of employed individuals with disabilities are limitations in past work experience, attitude, specific disabilities, cost, perception, and the sexes.

The history of working with people with disabilities may influence an employer's likelihood of hiring others with disabilities. If the employer has had a negative past experience working with someone with a disability, he or she may not "see" the individual but will make a generalized assumption about working with individuals with disabilities and choose not to hire the individual (Ju, Roberts, & Zhang, 2013; Smith, Webber, Graffam, & Wilson, 2004). Yet for those who employ individuals with a disability, it is their insight of the individuals with

disabilities that is used to determine how the experiences turn out. In other words, employer insight about disabilities impacts employment for individuals with disabilities (Hernandez et al., 2000; Popovich, Scherbaum, Scherbaum, & Polinko, 2003; Smith et al., 2004). If a potential employer has had a positive experience with an individual with a disability, the potential employer may have a more positive attitude when hiring an individual with a disability as a prospective employee.

A second reason individuals with disabilities may not be hired could be attitudinal on the part of the prospective employee or that of the employer. A review of 37 different studies suggests that employers will typically express positive attitudes toward the hiring of individuals with a disability, yet if the potential employer has a negative attitude toward individuals with disabilities the likelihood they would hire a person with a disability is negative. Employer attitudes, if negative toward individuals with disabilities, are a significant barrier to employment for individuals with disabilities (Hernandez et al., 2000). Yet a more recent review of literature found that employers had positive attitudes about hiring individuals with disabilities in a global perspective; however, when discussing specific disabilities (e.g., intellectual disabilities) and whether they would or would not be open to hire people with disabilities, the attitude toward hiring was negative (Ju, Roberts, & Zhang, 2013).

Yet for those who do employ individuals with a disability, it is their perception of the individuals with a disability that is determines how positive the experience is (Hernandez, Keys, & Balcazar, 2000; Popovich, Scherbaum, Scherbaum, & Polinko, 2003; Smith et al., 2004). Having worked positively with an individual with a disability has been known to increase the perception of an employer because they may have a better understanding of the individual with a disability (Popovich et al., 2003). Having a positive perception of individuals with disabilities

proves to provide a more positive experience for everyone involved. The employer, because of more positive perceptions, is more likely to rate the employee with a disability higher. However, the ratings of employers are subjective and differ depending upon their perspective of what they see and what they want to see in the workplace from the employee whether disabled or not (Smith et al., 2004).

If the individual with a disability has a negative attitude toward other employees, they may choose not to work or may make the work experience difficult for everyone causing turmoil in the workplace and possibly losing their employment (Smith Webber, Graffam, & Wilson, 2004). Finding the most favorable work experiences for individuals with a disability may be dependent upon the attitude they hold toward other individuals with a disability (Smith et al., 2004).

The specific type of disability may also affect views about hiring a given individual with a disability (Ju et al., 2013). For example, individuals with sensory or physical disabilities are more likely to be hired than individuals with intellectual or psychiatric disabilities (Ju et al., 2013). Although individuals with ASD often experience sensory challenges, their symptom expression is typically much broader than this characteristic alone. It is not possible to understand the implications for an individual with ASD with average of above average intellectual functioning and sensory challenges because employers may deem their challenges in social interaction the most relevant characteristic.

Another determinant to hiring or not hiring an individual with a disability could be the cost; however, the costs associated with insurance and accommodations are within reason and may even be negotiable (Ju et al., 2013). If the employer believes it would take too much to

prepare and place the individual causing an additional cost to the organization, they may choose not to employ them (Fraser, Ajzen, Johnson, Hebert, & Chan, 2011).

Not only could a prior experience with an individual with a disability change the perception of an employer, but the sex of the employer may change it as well (Jones & Stone, 1995). Specifically, females are more comfortable than males as they work alongside individuals with disabilities. Women were also found to believe that providing accommodations or even mentoring individuals with disabilities was more positive than their male counterparts too (Jones & Stone, 1995; Popovich et al., 2003).

Barriers to Employment

Barriers of the general population

When the unemployment rate for the United States was at its highest, obtaining employment had become increasingly challenging; however, since the rate of unemployment has returned to a low of 6.4% employment is more readily available. Yet even under ideal economic circumstances, the process of securing employment is sometimes fraught with barriers. For some individuals transitioning from school to the workforce, barriers may be easily overcome, while others have a great deal of difficulty overcoming them. A number of early research accounts have determined categories for the barriers that individuals face in obtaining employment. Scholars suggested employment barriers could be categorized in different ways but consistently included (a) job qualifications, (b) social and interpersonal conflict, (c) legal and financial problems, and (d) emotional-personal problems (Corbett, 1973; Miller and Oetting,1977; United States Department of Labor, 1968; Zimple, 1971). Additional barriers for individuals with ASD often include insufficient access to transportation, job availability, lack of ability or skill, previous work history, credentials, education, and work experience. Similar to

the entire unemployed population, individuals with ASD may experience reading and language difficulties, lack of access to job information, health concerns, arrest records, and the attitudes and values of decision makers may also create barriers for many pursuing employment (Fabian, Ethridge, & Beveridge, 2009; Garcia-Iriarte, Balcazar, & Taylor-Ritzler, 2007; Leasher, Miller, & Gooden, 2009; Lindstrom, Doren, & Miesch, 2011; Miller & Oetting, 1977; Spagnolo et al., 2011). A short description of some of these barriers follows.

Barriers associated with characteristics of ASD

Social-Communication Functioning. Although social and communication are now combined in the DSM-5 (APA, 2013), they are reviewed consecutively in this section so that special emphasis can be placed on all aspects of these challenges. Impairments in social functioning represent a major barrier to obtaining competitive employment for individuals with ASD. Almost every employment position requires the ability to interact socially by making eye contact, building peer relationships, and being aware of others. Further, some people on the spectrum react to social challenges in an explosive manner, which may ultimately end an otherwise successful interview and, when employment has been obtained, could lead to termination of employment (Hendricks, 2010).

Individuals experiencing deficits in these areas may be less likely to obtain competitive employment unless they work with Vocational Rehabilitation (VR) to increase social interactions in a positive way. Employers can also improve their understanding of social interactions for the individual with ASD by working with VR counselors to help in the workplace (Chappel & Somers, 2010). Training for employment skills may need to be intense, but must always be relevant to the skills required to be successful (Lattimore, Parsons, & Reid, 2006). Individuals with ASD were more likely to obtain and retain employment if they receive social skills training

prior to leaving the school setting (Henn & Henn, 2005). Adults with ASD were more successful in job training if it was paired with training that resembles on-site training (Lattimore et al., 2006). Furthermore, the greater the number of opportunities for the individual with ASD to work per week, the greater the skills they are able to learn and become proficient with (Lattimore et al., 2006). Greater success is achieved when individuals with ASD are supported in the field as well as supplementing their training in multiple locations that are not work related. With these types of training, the work skills for the person with ASD are enhanced through training both on and off the job site (Lattimore et al., 2006). Case managers can also assist with providing supports both on and off the job site to help with employment (Garcia-Iriarte et al., 2007). If individuals with ASD were to find employment as youth during the summer, there would be an increase of four times in the likelihood of paid employment later (Carter et al., 2009).

Individuals with ASD may experience difficulty in obtaining or maintaining employment when they fail to understand social rules, customs, cues, nonverbal body language, and understanding both their own and others feelings. They will need to be taught social skills such as greeting others appropriately, asking for help when it is needed, holding a conversation with a co-worker, giving and receiving compliments, and interrupting appropriately (Chappel & Somers, 2010). For someone with ASD, these skills/abilities can be very difficult to learn and exhibit. Exploring through role play, direct instruction, video modeling, and scripting can be effective (Chappel & Somers, 2010; Wilczynski, Trammell, & Clarke, 2013). In order to increase coworker relations it is important for the individual with ASD to learn the social rules of the job site and learn to interpret social cues (Strub & Stewart, 2010). Not only should the school staff work closely with the individual with ASD, but they should work with the potential

employer as well. Teaching the employer and other employees how to address social issues helps not only the individual with ASD, but those in the workplace as well (Chappel & Somers, 2010).

As stated previously, some ways the skills can be taught are through direct training, role play, video of one's self, mock interviews, and the use of scripts (Chappel & Somers, 2010; Wilczynski, Trammell, & Clarke, 2013). Ways to capitalize on mastered skills is to determine how those skills and abilities can enhance what is needed in the workplace. Further, focusing directly on what skills are needed for success and specifically plan role playing interactions for those skills is a tactic that enhances skills. In order to be successful in the workplace, the individual with ASD must be able to transfer the social skills worked on through role play in separate settings to the workplace. This may mean that special training will take place frequently with chances to practice is multiple settings.

Their communication may also be a barrier because the individual with ASD may not understand which terms or phrases to use to communicate clearly in social situations, including the interview. This means they may use inappropriate comments, have difficulty in processing information being presented to them, have difficulty in understanding instructions, trouble with unspoken subtlety, and miscommunication (Muller, Shuler, Burton, & Yates, 2003; Rao, Beidel, & Murray, 2008). Individuals with ASD also have a very literal way of interpreting what they are hearing causing them to misunderstand much of what they hear. When they are participating in a job interview, they may be unable to ask appropriate questions and/or express their thoughts and even the skills they have acquired (Cederlund, Hagberg, Billstedt, Gillberg, & Gillberg, 2008). Nonverbal behavior could be considered social skills and/or communication and individuals with ASD may need assistance in each. The nonverbal behaviors may need to be

taught to the individual with ASD so that they are able to understand what they are seeing and know what is acceptable and inacceptable. Nonverbal aspects of communication can determine success in the workplace. Thus, training may be necessary. Gainful employment may be more difficult to achieve for some individuals with disabilities because they have significant communication difficulties, which interfere with their ability to be understood (Carter et al., 2011; Hasnain & Balcazar, 2009). It is unclear if inadequate communication skills are truly a primary barrier to employment in many situations or if those who hire employees anticipate severe communication impairments as a barrier when none exists (Carter et al., 2011).

Restricted, repetitive, nonfunctional patterns of behavior, interest, or activity. Many individuals with ASD experience a preoccupying interest that distracts them from immediately relevant activities (Rao, Beidel, & Murray, 2008). This has implications for the interview and the potential employers' view about the likelihood that the individual would make an ideal employee. For example, if the person on the spectrum initiates a discussion about their restricted interest and it is not appropriate to an interview, the employer may worry about their suitability in the workplace. This is likely to be underscored further when they do not shift to the appropriate topic initiated by the employer.

Challenges associated with restricted interests may be addressed, in part, by providing training in the area of understanding the expectations of the workplace. Employees need to know and understand that sometimes hidden expectations occur in the workplace. Simply exposing them to such occurrences will not prepare them. The individual with ASD must understand what to expect and through education they will be better prepared.

Additional barriers associated with ASD characteristics. Some individuals with ASD may not have the cognitive ability to learn the skills needed for a particular job while others on

the spectrum will have high intellectual functioning. Clearly, for competitive employment to occur, a good match must exist between the skill set required for the job and the capacity of the individual to obtain those skills. Even when the person on the autism spectrum has great cognitive strengths, absence of or insufficient preparation and/or support for employment as well as gaps in their knowledge may undermine the likelihood employment will be attained (Hall & Parker, 2010). As stated previously, the purpose of VR services is to assist individuals with disabilities in preparing for, obtaining, and retaining employment.

Sensory issues are barriers to those individuals with ASD who struggle when there is excessive noise, tastes or smell or changes in lighting or textures. They may be either hypersensitive or hyposensitive and will need assistance in addressing these barriers in order to continue their employment (Allen, Wallace, Renes, Bowen, & Burke, 2010; Burke, Andersen, Bowen, Howard, & Allen, 2010; Hurlbutt & Chalmers, 2002; Hurlbutt & Chalmers, 2004; Müller, Shuler, Burton, & Yates, 2003). Experiencing sensory challenges during an interview will impair performance, which would undermine the likelihood even a highly skilled individual would obtain the job.

Individuals with ASD may experience low self-esteem, low levels of confidence, discomfort in working with other people, absence of or insufficient preparation and/or support for employment, and gaps in their knowledge (Hall & Parker, 2010). Individuals with less severe disabilities have been known to be more likely to obtain employment (Garcia-Iriarte et al., 2007). Barriers to employment can be overcome. Knowing and understanding what is expected when attempting to gain employment may allow individuals to prepare adequately for any barriers they may face.

Structural barriers for individuals with ASD

Governmental variables. A surprising barrier to employment for persons with disabilities is the presence of governmental monetary supports such as Supplemental Security Insurance (SSI), Supplemental Security Disability Insurance (SSDI), and Social Security payments. A quick synopsis of the Social Security Act reveals that those who are gaining assistance through federal support must be elderly, disabled, or a spouse or child who has lost a family member through death. For those individuals who are deemed disabled, the act specifies that the disability is a total and permanent disability or one that will result in death (Social Security Act, 1935). Comparing 2001 to 2013, an average amount received as SSI or SSDI is $531 and $526 respectively (Social Security: The Official Website of the Social Security Administration, February 2013). The average payment is minimal at best and inflation is certainly outpacing the increases to those individuals receiving it. Though the assistance received is minimal, some individuals with ASD would rather not work competitively for fear of losing the monetary support they receive (Berry, 2000; O'Day, 1999, Rosenheck et al., 2006). Rather than the government assisting individuals with disabilities in gaining employment, simply paying their SSI/SSDI benefits becomes a barrier to attempting employment (Garcia-Iriarte et al., 2007). Even if the person on the spectrum wanted a higher income than the government issued assistance, they are discouraged from seeking employment for work that is more than a few hours per week out of fear that they will lose all that they receive (O'Day, 1999). Individuals with disabilities receiving assistance through SSI and SSDI are less likely to be successful in obtaining employment than those who do not receive it (Berry, 2000; O'Day, 1999). Those who make this choice may actually become financially worse off if they choose competitive employment. Individuals with ASD, like others receiving SSI and SSDI, may choose to remain

unemployed or employed within a habilitative facility out of fear of losing the little income they receive through governmental assistance.

Transportation. When individuals with ASD do seek competitive employment, transportation may be a problem. Given the low rate of employment among the ASD population, economic disadvantage is more likely which increases the risk that transportation will be a barrier. If a person is not able to access some form of transportation to get to and from the workplace, they will be unable to work and may actually miss a scheduled interview.

Funding. A lack of funding in training for persons with disabilities has been deemed a barrier (Citron et al., 2008). Funding options appear to be limited even for the provision of assistive devices and employers will need to seek funding in creative ways (Crudden et al., 2005). Many individuals with ASD are in need of very specific training and may even need on-the-job support such as a job coach. With support needed and lack of funding options available, those individuals with ASD may not gain competitive employment (Garcia-Iriarte et al., 2007; Lattimore, Parsons, & Reid, 2006; Rutkowski, Daston, VanKuiken, & Riehle, 2006).

Sex Differences. Barriers in competitive employment for individuals with disabilities could be due to the attitudes of those in the position to hire. Types of negative attitudes toward persons with disabilities in the workplace could present as having false expectations about the performance of the individual, feelings that the individual with a disability causes undue burden on the organization, and/or being uncomfortable because they are in close proximity with the disabled person (Jones & Stone, 1995). The disabilities that have been known to evoke the most negative responses in the workplace were mental illness, mental retardation, alcoholism, brain injury, and sensory impairments (Jones & Stone, 1995). The differences in the attitudes of individuals in the position to hire appear to be different based on their sex. Women in the hiring

role, for instance, were found to be more positive about employment of persons with disabilities and are more likely to hire them than males in the same role (Jones & Stone, 1995). Women are more likely to have and demonstrate positive attitudes toward individuals with disabilities (e.g., mental illness) than their male counterparts (Hampton & Sharp, 2014; Laws & Kelly, 2005). Women are also more willing to be in close proximity to persons with disabilities and feel more positively about their employment (Thomas et al., 2007). They are less likely to distance themselves from persons with disabilities than males (Vilchinsky et al., 2010). Males, on the other hand, have more of a negative connotation when working alongside individuals with disabilities (Thomas et al., 2007; Werner & Davidson, 2004). Children's regard for others directly relates to how they regard the same groups of people (e.g., individuals with disabilities) when they become adults (Laws & Kelly, 2005). Adult males and male children regard persons with disabilities more negatively, meaning they are more likely to react with rejection, anger, irritation, disgust, and consternation than adult females (Laws & Kelly, 2005; Werner & Davidson, 2004). Males tend to demonstrate a higher rate of rejection toward individuals with disabilities than females. They also distance themselves from individuals with disabilities more than females (Vilchinsky et al., 2010). Females, acting in a more socially acceptable way, react more positively toward individuals with disabilities. Females, as children and as adults, tend to leave a more positive impression of individuals with disabilities (Hampton & Sharp, 2014; Laws & Kelly, 2005; Thomas et al., 2007). The reason for this could possibly be that females want to leave a more prosocial or positive impression on society (Hampton & Sharp, 2014; Thomas et al., 2007; Werner & Davidson, 2004). Their increased prosocial emotions could account for their higher acceptability of persons with disabilities (Werner & Davidson, 2004). Therefore, if the individual in the position to do the hiring is male, the likelihood of gainful employment for

an individual with ASD is less likely. In contrast, when females are doing the hiring, employment outcomes may be better for individuals with ASD. However, research is beginning to show that the gap in differences between male and females with regard to attitudes toward hiring persons with disabilities are decreasing (Hampton & Sharp, 2014), so this may not be the case.

Summary

A broad range of barriers to competitive employment for individuals with ASD has been identified in the literature. First, individuals with ASD experience the same barriers as the general population, and unemployment remains a serious problem for a number of different groups in the United States at this time. In addition, people on the autism spectrum experience barriers that are directly tied to the symptoms associated with their diagnosis. That is, the defining and associated features of ASD can be incompatible with easy employment. Lastly, structural barriers diminish the likelihood individuals with ASD will become competitively employed.

The primary focus of this dissertation is the interaction between barriers associated with symptoms of ASD and interviewing, the first step toward competitive employment. By better understanding the views of interviewers about the interview process, professionals will be better positioned to develop more effective trainings for individuals with ASD. In addition, this dissertation focuses on one structural variable: sex differences among interviewers. Given the increased likelihood of being hired by female interviewers for individuals with ASD, it is important to gain insight into the differences in their views about ASD symptoms and expectations during the interview.

Research Questions

The next chapter will present the research questions and statistical result of the survey. It will demonstrate how the survey was aligned specifically with the research questions. Following are the research questions addressed by the survey:

Research Questions #1: Familiarity

a. Do business executives self-report significant familiarity with characteristics of individuals with ASD?
b. Are female executives more familiar with characteristics of ASD than male executives?
c. Do business executives who self-report lower levels of familiarity with ASD identify fewer favorable work qualities among individuals with ASD?

Research Questions #2: Qualities

a. To what extent do female and male business executives rate preferred qualities as important in prospective employees?
b. Do the ratings of preferred prospective employee qualities vary across the sexes?
c. Do business executives believe that individuals with ASD exhibit positive work qualities?

Chapter 3

Research Methodology

This study explored the knowledge business executives had about autism spectrum disorder (ASD) with regards to their familiarity with individuals with ASD, the qualities they felt were important for their employees, and whether or not individuals with ASD had those important employee characteristics. This study also explored the differences in results compared by sex.

Participants

A total of 2,520 emails were sent to Rotary Club members, which included the initial email and three follow up emails (four total) requesting participation in the survey. Of the 840 Rotary Clubs contacted via email, 208 respondents completed the survey. Of the number that completed the survey, 51 were excluded because they did not meet the eligibility criteria of being in the hiring role. It is not possible to determine a response rate for the number of respondents because each Rotary Club has a different amount of members and there is no guarantee that it was distributed to the entire membership. However, approximately 24% of Rotary Clubs contacted completed at least one survey.

Table 1 shows the 23 states that had Rotary Clubs included in the survey. The range for the number of respondents completing the survey varied considerably, with the smallest number of respondents (n = 1) from Idaho and a largest number of respondents (n = 22) from Wisconsin. Given population differences across these states, large differences can be expected. However,

the state of Idaho had only one survey completed out of the 75 Rotary Clubs that were contacted. It is unknown why Idaho Rotarians were unlikely to respond.

Of the 208 Rotary Club members who completed the survey, 97 (61.8%) were male and 54 (34.4%) were female; six (3.8%) respondents chose not to respond to the gender question. The number of respondents who were in the hiring role was 157 (n=75.5%), those not in a role to hire was 51 (n=24.5%), and the number who did not complete the survey questions 14 (6.7%). The 51 respondents that were not in the role to hire were excluded from the study, leaving a total of respondents for this research at 157.

Table 1
Demographic of Participant Location by State

State	# Sent	# Responding	% Responding From Each State
Arizona	54	15	27.8
California	109	22	20.1
Colorado	35	4	11.4
Hawaii	27	4	14.8
Idaho	75	1	1.3
Indiana**	1	1	100
Kansas	22	3	13.6
Kentucky	20	8	40.0
Louisiana**	1	1	100
Maine	23	2	8.7
Massachusetts	93	14	15.1
Michigan	58	5	8.6
Montana	39	5	12.8
New Hampshire**	1	1	100
New Jersey**	1	1	100
New Mexico	9	3	33.3

Oklahoma	30	4	13.3
Oregon**	1	1	100
Pennsylvania	102	10	9.8
Tennessee	31	18	58.1
Virginia**	1	1	100
Washington	55	8	14.6
Wisconsin	58	22	37.9
No Data		3	
Total	**846**	**157**	**18.6***

** Total response rate for the entire sample*
*** Only one club was contacted in this state*

Geographic location for respondents were also categorized based on region in the United States. Each region was well represented with the exception of the Rocky Mountains. However, almost one-third of respondents did not provide this information. Table 2 gives a summary of that information.

Table 2

Regions

Region	Number	%
Northeast	28	17.8
Midwest	31	19.8
Rocky Mountains	10	6.4
Southeast	28	17.8
Southwest	22	14.0
Pacific	35	22.3

No Data	3	1.9
Total	**157**	**100.0**

Respondents also reported on the size of the population in which business executives worked. The majority (n = 96; 61.5%) of respondents completing the survey were business executives working in a city/town having a population greater than 50,000 shown in Table 3. However, there were a significant number (n = 45; 28.9%) of respondents from a city/town with a population of at least 10,000 yet less than 50,000.

Table 3

Population

Population	**# of Towns**	**Percent**
Population greater than 50,000	96	61.1
Population at least 10,000, but less than 50,000	45	28.7
Population less than 10 ,000	15	9.6
No Data	1	0.6
Total	**157**	**100.0**

The type of position held by respondents was also assessed (See Table 4). The majority (n=85; 54.1%) of respondent's occupation was management/professional/and related, and occupations infrequently identified were agriculture (n=1,) production, transportation, material moving (n=3), and construction/extraction/maintenance (n=5). Respondents reported that they were most likely to hire for management (n = 58) and entry level (n = 98) positions. The fact that 37.2% of respondents would likely hire for management positions may be a relevant variable

for future examination because, with only 6% of the ASD population being competitively employed at all, it seems these executives have probably not had considerable experience facing this decision.

Table 4

Occupation

Occupation	# of Business Executives	Percent
Management, professional, & related	85	54.1
Service	12	7.6
Sales and Office	10	6.4
Agriculture	1	0.6
Construction, extraction, maintenance	5	3.2
Production, transportation, material moving	3	1.9
Government	10	6.4
Health care	11	7.0
Other	19	12.1
No Data	1	0.6
Total	**157**	**99.9**

Procedures

Participant Selection

Participants were located by contacting Rotary Clubs from across the United States and asking them to deliver a researcher created survey to their membership. Rotary International was

selected because they are comprised of business executives who are likely to be in a position to hire staff. They also work specifically in their area and around the world putting "Service above self" as their motto states. They work both within their local community and internationally serving communities. They have participated in projects that have ranged from eradicating polio by making the vaccine more accessible in third world countries to discovering creative ways to meet the local community's needs. They have a "Four Way Test" that explains their mission: "Of the things we think, say or do 1) Is it the TRUTH? 2) Is it FAIR to all concerned? 3) Will it build GOODWILL and BETTER FRIENDSHIPS? 4) Will it be BENEFICIAL to all concerned" (https://www.rotary.org/myrotary/en/guiding-principles). It was hoped that there would be a higher rate of return for the surveys from Rotarians than from the general business population due to their service oriented population. However, Rotarians may also be more open to hiring individuals with disabilities, thus limiting generalization to the rest of the population. Thus, this sample likely produced the most positive views of ASD from business executives.

In identifying the Rotary Clubs that were contacted as potential respondents for this project, the researcher determined the regions of the United States by conducting an Internet search using the search term: "Regions of the United States." The researcher looked for a map with more than four regions and less than ten regions as a good sampling for the research project. The map used had six regions. The following is the list of regions and the states within each region as drawn by the blind draw: 1) Northeast comprising Maine, Pennsylvania, Massachusetts, New Hampshire, Delaware, Vermont, New York, Maryland, Connecticut, New Jersey, and Rhode Island; 2) Midwest: Wisconsin, Michigan, Kansas, Missouri, Ohio, Iowa, Indiana, Illinois, South Dakota, North Dakota, Nebraska, Minnesota; 3) Rocky Mountains: Colorado, Idaho, Montana, Wyoming, Nevada, Utah; 4) Southeast: Kentucky, Virginia,

Tennessee, Mississippi, North Carolina, Arkansas, Florida, Alabama, Georgia, West Virginia, Louisiana, South Carolina; 5) Southwest: Oklahoma, New Mexico, Arizona, Texas; and 6) Pacific: Washington, Hawaii, California, Oregon, Alaska. Once the regions were determined, a list was made of each state included in each of the regions. The researcher then determined the state from each region that was included in the study as a sampling through a blind draw. A working list was then created for each region with the names of each state in the order in which they were drawn through the blind draw. The researcher used electronic mail (e-mail) to send the survey to members of Rotary Clubs across the regions of the United States. As the Rotary Clubs from each state were contacted, an Excel document was created with Rotary Club information that included the region, state, town, club name, meeting place, website, contact person(s), email address (if available), city population, contact date (first attempt), time of contact, 2nd attempt/time of contact, and 3rd attempt/time of contact. The researcher sent an email to the primary contact person for each of the Rotary Clubs to establish rapport and to begin the recruitment process. The contact person was sent an informational email that included the link to the survey as well as a brief explanation of the purpose of the survey that looked at competitive employment and the ASD population. The email included communication that follow-up emails would be sent as a reminder for the members who had not yet completed the survey. The purpose of this step was to increase the response rate and to reassure the contact person that multiple follow-up communications would be occurring. The purpose of increasing the response rate was the reason for this step; however, research showed that the response rate for internet surveys is typically low (Pit, Vo, & Pyakurel, 2014). High response rates may be more difficult to get because people may not respond to email surveys seeing them as spam (Kittleson & Brown, 2005). The Rotary contact was encouraged to send surveys directly to Club

members so that the name of members would not be released. This step was to provide a higher level of confidentiality for Rotary Club members and could potentially increase the response rate because the email would not be identified as 'junk' or spam from the respondent's computer and because it was to be sent from a familiar individual. The researcher asked the contact to send the same information to each of the members in a mass email. The informational email included a brief description of the importance of the research and an embedded link to the survey (see Appendix A). This process continued until the Rotary Clubs from three states in each region was contacted in hopes of getting a larger number of respondents.

The researcher used the United States census website[5] created by the United States Census Bureau with estimates for 2013 population to find the population of each city in the state from the regions of the Rotary Clubs. In this way, the data could be stratified between metropolitan[6] and micropolitan[7] areas for further research. Using the census website, the researcher randomly selected the state in each region and then identified the largest metropolitan city/town in the state that has a Rotary Club as determined by the population listed from the 2013 estimate for the state having Rotary Clubs. Some of the city/towns contacted by way of Rotary Clubs were not listed on the census web site or did not have data for the 2013 population. When this occurred, the researcher used the data given for the 2010 census or did not have data in the database. This information was used by the researcher, but the respondents actually completed a question in the survey regarding the population of their city/town.

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[5] http://quickfacts.census.gov/qfd/index.html
[6] Metropolitan area: population of 50,000 or more
[7] Micropolitan area: population of at least 10,000 and no more than 50,000

The researcher already used the Rotary International website to find the names of cities/towns that had Rotary Clubs. For example, according to the Rotary Clubs finder, Indianapolis, Indiana had five Rotary Clubs listed on the web-site. The researcher then used the Rotary Club Finder web site and the list generated to make initial contact with each of the Rotary Clubs. A list was generated by the web site according to the distance from the name of the city/town put into the search box. If a web site was listed, the researcher would click on the link for the Rotary Club web site and was taken to the club's site. Once there, the researcher identified the contact person by finding the Leadership link or the Contacts link. On each web site the researcher found the club's president, vice president, and president elect if available and click the link that would allow a direct email to be sent to the member. If there was no listing of club leadership with a link that would take the researcher directly to an email contact form, the researcher would use the contact email address for the Club to contact them. Next, the researcher examined the other Rotary Clubs within the same state that were listed on the Rotary website, and cross-referenced using the US Census webpage. The size of the state determined the number of Rotary Clubs that were contacted. Some states had a relatively small number of Rotary Clubs and others had a large number. For this reason, the number of emails for each state varied. For example, the number of Rotary Clubs available in the state of New Mexico was 9, but the state of California had more than 100. The researcher did not continue contacting Rotary Clubs after contacting the last club on the page after contacting at least 100. In the state of California there were 109 Rotary Clubs contacted. If the state had less than 100 Rotary Clubs within their state, all Rotary Clubs were contacted. Rather than determine the smallest city/town to contact, the researcher continued contacting all Rotary Clubs through the generated listing from the Rotary Club Finder website including micropolitan and metropolitan cities/towns.

Some of the Rotary Club executives responded to the initial recruitment email, but others did not. After limited responses were received from the recruitment email, the sentences requesting the link be shared was highlighted in the recruitment email. The researcher continued to send emails to the Club executives in an attempt to increase the number of respondents to the survey. There were a total of four emails sent to each club; one recruitment email and three follow up emails. Though Rotary Club executives were asked to pass along the information and link for the survey, it appeared that most did not. Rather, they would either complete the survey themselves, pass the information on to another individual club member, take it to their board, or decline it altogether as was evidenced by email responses from Rotary Club members (see Appendix B). Some of the Rotary Club members that did respond to the researcher via email stated that they completed the survey or that they would send it on to their membership. Other Rotary Club members sent an email stating they were contacted too many times. It is unknown whether these individuals completed the survey or not. Even with multiple emails being sent to the executive Rotary Club members, the number of respondents was limited. An issue that occurred while attempting to contact the Rotary Clubs was the use of the web site. Though the opportunity to contact Rotary Clubs was made available through the use of the Club Finder web site, there was a maximum number of Rotary Clubs that could be contacted before the web site would lock and not allow any more contact for a period of time. Sometimes the length of time that no contact could take place was as short at 20 minutes, but other times it was as long as 90 minutes. In addition, there was a change of executive board members (e.g., president of the local Rotary club) during the period of the survey so the contact information was not always accurate. This made the process lengthier and extended the amount of time needed to contact each Rotary Club.

The survey was set up to give respondents the opportunity to self-report answers regarding employment and ASD. It began with general questions about the respondent and moved toward more specific questions about interviewing prospective employees (e.g., desirable characteristics) and knowledge about characteristics of ASD. The survey was maintained on the BSU.Qualtrics website. All data was maintained through the BSU.Qualtrics website as well. The data was gathered through the Qualtrics program and will be kept for as long as Ball State University retains the site license for the program and the researcher is able to access the program through the university. All data was collected through the BSU.Qualtrics website for each Rotary Club respondent. The data was then compiled and downloaded to an SPSS file. The survey was maintained through the BSU.Qualtrics website and accessed only by the researcher using a username and password.

Instrumentation

Survey

A 14-item survey was the instrument used for this research project (see Appendix C). The survey took an average of 15 minutes to complete; however, it took 22% of respondents five minutes to complete and 34% less than five minutes to complete (BSU.Qualtrics). The survey created for this research project included descriptive and geographic data. In addition, survey items were designed to answer the specific research questions for this study. Demographic questions were included to gather descriptive and frequency data on the sexes, occupation, population, position hired for, and location.

The survey was also developed to identify the importance of specific characteristics looked for during the interview process and qualities that would be desirable in employees. The survey was comprised of two five-point Likert Scale questions and one two point Likert Scale

question, along with ten multiple-choice questions. For the two questions using the five point Likert Scale, the responses range from Crucial to Very Unimportant. The response options for the two-point question are "People with ASD exhibit these qualities" and "People with ASD do not exhibit these qualities." The Likert Scale questions focused on qualities for employees, interview characteristics including non-verbal communication, and ASD qualities. The question focusing on desired characteristics in an employee address non-verbal communication or body language observed during the interviewing process. It also focused on the ways in which the interviewee completes an employment interview. Employee qualities focused on the features that an executive found to be valuable in his/her employees. Demographic information was also collected.

This study used a quantitative research design utilizing observational data gathered through a survey. The analysis of the survey used a cross tabulation statistical analysis. Frequency data were also gathered from the email responses of the survey. BSU.Qualtrics software was used to gather all data for tracking. The data from each of the survey questions was tallied and given a numerical and percentage value. This methodology allowed for the evaluation of the relationship between executive perceptions regarding individuals with ASD and why people on the spectrum may be less likely to obtain and retain competitive employment. The purpose of the quantitative study was to gather information that would assist in preparing individuals with ASD in gaining competitive employment through specific training of strategies to overcome barriers prior to entering the job market.

The survey design allowed participants anonymity in responding to questions regarding their perception of qualities and ideal characteristics of prospective employees in the competitive employment market. The anonymity was thought to encourage executives to be free to respond

honestly regarding characteristics and qualities needed to be successful in the competitive work environment as well as on their views regarding individuals with ASD.

The survey was also designed to determine the personal qualities that business executives find to be important in their employees. Once the business executive completed the personal qualities question in the survey, they were taken to a series of questions beginning with the interview. The next question focused on important qualities (referring to the non-verbal characteristics) preferred during the interview process. The question also focused on other characteristics that may be exhibited through the interview process, which might be preferred by business executives. These questions were developed to determine the most important personal characteristics and non-verbal characteristics to be focused on when interviewing for employment. The business executive was then asked their familiarity with ASD and whether they were "Very Familiar, Familiar, Somewhat Familiar, Not Familiar, or Not at all Familiar." The answer that the business executive gave for this question could shed light on all other survey responses. When asked if the business executive believed individuals with ASD exhibited specific qualities, the respondent would provide insight into just how much they knew about individuals with ASD. The focus of the survey was to determine if business executives could identify the characteristics of employees that they prefer and then to see if those characteristics were exhibited by individuals with ASD as well. That would mean that the business executives would need to know what some of the characteristics of ASD were and whether someone with ASD could also be one of their employees.

Statistical Analysis

Frequency data were gathered for each of the survey responses. Each of the responses was given a numerical value by the Qualtrics program. The BSU.Qualtrics program will house

the respondent information from the survey indefinitely. Information gathered by the BSU.Qualtrics program is encrypted to protect the data as it is being stored, as well as while it was being gathered. Having the data encrypted increases security of the data. The descriptive statistics presented in the study included both number and percentage. This was used for all frequency data tables. Initial descriptive statistics, such as sex, state, and city/town size were reviewed for accuracy with coding by the BSU.Qualtrics web site. The demographic data was discussed previously in this chapter.

Chapter 4

This chapter presents the results of the Competitive Employment and ASD Survey. Each research question was aligned with the survey results. A brief discussion will take place as the results of the research are presented. Further discussion will be presented in Chapter 5.

The first series of research questions involve familiarity. Specific research questions include:

a. Do business executives self-report significant familiarity with characteristics of individuals with ASD?
b. Are female executives more familiar with characteristics of ASD than male executives?
c. Do business executives who self-report lower levels of familiarity with ASD identify fewer favorable work qualities among individuals with ASD?

Of the 842 Rotary Clubs that were contacted to participate in the survey, 208 surveys were completed. Of the 208 surveys completed 51 respondents did not meet the criteria to complete the survey – being in the position to hire employees. These potential respondents were able to access the first question of the survey where they were asked if they were in the position to hire. If they chose the selection "no," they were immediately taken to the end of the survey – removing them from the respondent group. Of the remaining 157 survey respondents, there were 14 (6.73%) surveys that were partially completed rendering "no data" in some of the analyses.

One hundred fifty-seven Rotary Club members participated in the Competitive Employment and ASD survey. A frequency table shows the level of familiarity business executives self-reported with regards to the characteristics of ASD (see Table 5). "How familiar are you with ASD" is the question posed to business executives completing the survey. There were three familiarity categories in this survey. The first level of familiarity with ASD was Very Familiar/Familiar knowing at least one characteristic/being able to answer questions about ASD. The second familiarity category is being Somewhat Familiar with the characteristics of ASD meaning these respondents know at least one characteristic of ASD. The third and final familiarity category is Not Familiar/Not at all Familiar meaning these respondents have either heard of ASD/not heard of ASD. The results from this analysis showed there were 42 (26.8%) respondents who self-reported being Very Familiar/Familiar, 68 (43.3%) who self-reported being Somewhat Familiar, and 44 (28.0%) respondents who self-reported being Not Familiar/Not at all Familiar with ASD. Three (1.9%) respondents did not complete this question for which there is no data.

Table 5

Familiarity with ASD

Familiarity	Frequency	Percentage
Very Familiar/Familiar	42	26.8
Somewhat Familiar	68	43.3
Not Familiar/Not at all Familiar	44	28.0
No Data	3	1.9
Total	**157**	**100**

Previous research found that the sex of the person in the role to hire was a determining factor in employment for individuals with disabilities. This researcher chose to include data to determine if the sex of the individual continues to be a factor in employment. A frequency table for the sexes is found in Table 6.

Table 6

Sex of Respondents

Sex	Frequency	Percent
Male	97	61.8
Female	54	34.4
No Data	6	3.8
Total	**157**	**100**

Next, cross-tabulation tables were produced for visual analysis of data. A 2 (sex) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was statistical significant association between the sexes and familiarity, X^2 *(2) = 7.913, p> .019.* Based on the Pearson chi-square analysis, there is a statistically significant association between the two variables of sex and levels of familiarity with ASD, resulting in a rejection of the null hypothesis. A person's sex is systematically related to their level of familiarity with ASD among business executives (see Table 7). Overall, female business executives self-report a higher level of familiarity than males. More than 85% of females reported being very familiar or somewhat familiar with ASD whereas less than two-thirds (63.9%) of males report this level of familiarity. For those who reported they are not familiar/not at all familiar there was a large difference between males and females. There were a total of 14.8% of females who reported their

unfamiliarness with ASD, but 36.1% of males reported this. This implies that training should be done to improve the familiarity of ASD with male business executives as more than one-third reported little to no familiarity with ASD.

Table 7

Chi Square Analysis: Familiarity & Sex

Familiarity	Male n (%)	Female n (%)	Total
Very Familiar/Familiar: I know at least one characteristic of and can answer questions about autism spectrum disorder-I can answer questions about autism spectrum disorder.	23 (23.7)	19 (35.2)	42 (27.8)
Somewhat Familiar: I know at least one characteristic of autism spectrum disorder.	39 (40.2)	27 (50.0)	66 (43.7)
Not Familiar/Not at all Familiar: I have heard of autism spectrum disorder – I have never heard of autism spectrum disorder.	35 (36.1)	8 (14.8)	43 (28.5)
Total	97(100.0)	54 (100.0)	151 (100.0)

$X^2(2)= 7.913, p > .019$

Familiarity

Questions 9 and 10 of the survey were used to answer the next research question. Question 10 "Identify whether or not people with autism spectrum disorder have the following qualities," was used to ascertain whether business executives who self-report lower levels of familiarity with ASD identify fewer favorable work qualities among individuals with ASD. A 3 (familiarity) by 11 (work qualities) cross tabulation table was developed to allow for visual analysis of the relationship between these two variables. Pearson Chi Square analysis was used to determine if there was statistical significance between the variables of familiarity and whether or not the business executives believed the person with ASD has specific qualities. Separate chi-

square analyses were run for each of the 11 work qualities with familiarity serving as the second variable. However, the analysis was not completed when the assumptions for the statistical analysis were not met. For example, when a cross tabulation table showed that fewer than five participants responded affirmatively in a cell, a chi-square analysis was not completed. Overall, a relationship between familiarity and perceptions about the work qualities of individuals with ASD was not found. Specific details regarding analyses are reported separately below.

Work Quality: Ability

Business executives' perceptions of whether or not people with ASD are capable were assessed with 132 out of 171 respondents answering this question. The three familiarity categories are Very Familiar/Familiar, Somewhat Familiar, and Not Familiar/Not at all Familiar. Of the 132 respondents, n=42 (30.2%) reported being Very Familiar/Familiar with ASD, 64 (46.0%) reported being Somewhat Familiar, and 33 (23.7%) reported being Not Familiar/Nota at all Familiar.

The analysis between the respondents' level of familiarity with ASD and whether or not the respondents believe people with ASD are or are not able was completed. The vast majority of respondents (95%) reported that they believe individuals with ASD are capable. In fact, the number of respondents who indicated people with ASD are not able was so low that when distributed across categories, the number of respondents was too low to warrant further analysis.

Table 8

Cross-tabulation - Familiarity & Ability

Familiarity	Exhibit the Quality n (%)	Does not exhibit the Quality n (%)	Total n (%)
Very Familiar/Familiar	40 (28.7)	2 (1.4)	42 (30.1)

Somewhat Familiar	61 (43.9)	3 (2.2)	64 (46.1)
Not Familiar/Not at all Familiar	31 (22.3)	2 (1.4)	33 (23.7)
Total	**132 (94.9)**	**7 (5)**	**139 (99.9)**

Work Quality: Punctual/Good Attendance

Of the 139 respondents who reported both their familiarity and their perception about the punctuality of individuals with ASD in the workplace, the majority reported some level of familiarity (Very Familiar/Familiar with ASD n=42 [30.3%]; Somewhat Familiar with ASD n=63; [45.3%]). The relationship between familiarity and punctuality was not explored with a chi-square analysis because (a) less than nine percent of respondents indicated individuals with ASD were not punctual and (b) the distribution of "not punctual" endorsements across levels of familiarity resulted in a violation of the assumptions for a chi-square.

Table 9

Cross Tabulation – Familiarity & Punctual/Attendance

Familiarity	**Exhibit the Quality n (%)**	**Do not Exhibit the Quality n (%)**	**Total n (%)**
Very Familiar/Familiar	39 (28.1)	3 (2.2)	42 (30.3)
Somewhat Familiar	56 (40.3)	7 (5.0)	63 (45.3)
Not Familiar/Not at all Familiar	32 (23.0)	2 (1.4)	34 (24.4)
Total	**127 (91.4)**	**12 (8.6)**	**139 (100)**

Work Quality: Attention to Detail

There were 140 respondents who endorsed questions regarding both level of familiarity and the work quality of "pays attention to detail." A 2 (exhibit) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there is a statistically significant association between whether or not the individuals do or do not exhbit the quality and familiarity. The majority of respondents indicated that they were somewhat familiar with ASD (n=64; 45.7%), with slightly more (n=42; 30.0%) indicating they were Very Familiar/Familiar than those reporting they were Not Familiar/Not at all Familiar (n=34; 24.3%) with the characteristics of ASD. Most respondents (85.7%) reported that individuals with ASD do pay attention to details (see Table 10). The Pearson chi-square analysis resulted in no statistical significance, suggesting there is no association between the variables of familiarity with ASD and business executives' evaluation of whether or not people with ASD pay attention to detail, X^2 *(2) = 293, p<864*.

Table 10

Chi Square Analysis: Familiarity & Attention to Detail

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	37 (26.4)	5 (3.6)	42 (30.0)
Somewhat Familiar	54 (38.6)	10 (7.1)	64 (45.7)
Not Familiar/Not at all Familiar	29 (20.7)	5 (3.6)	34 (24.3)
Total	**120 (85.7)**	**20 (14.3)**	**140 (100.0)**

X^2 *(2) =.293, p<.864*

Work Quality: Communicate Clearly

There were 141 respondents who endorsed questions regarding both familiarity with ASD and the quality of communicating clearly. A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whenther there was a statistically significant

association between whether or not they exhibit the quality and familiarity. The vast majority (73.8%) of respondents reported that clear communication was a problem for individuals with ASD (see Table 11). The Pearson chi-square analysis resulted in no statistical significance, suggesting there is not an association between a business executive's level of familiarity with ASD and their evaluation of whether or not people with ASD are able to communicate clearly, $X^2(2) = 1.085, p < .581$. In other words, the level of familiarity a business executive has with ASD is not dependent upon whether or not they believe people with ASD are able to communicate clearly.

Table 11

Chi Square Analysis: Familiarity & Communicates Clearly

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	11 (7.8)	30 (21.3)	41 (29.1)
Somewhat Familiar	15 (10.6)	51 (36.2)	66 (46.8)
Not Familiar/Not at all Familiar	11 (7.8)	23 (16.3)	34 (24.1)
Total	**37 (26.2)**	**104 (73.8)**	**141 (100.0)**

$X^2(2) = 1.085, p < .581$

Work Quality: Education

The majority (79.2%) of the 139 respondents who endorsed items related to familiarity and education indicated they believe individuals with ASD are well educated (see Table 12). A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there is a statistically significant association between exhibiting the quality and familiarity. The Pearson chi-square analysis resulted in no statistical significance, suggesting no association

exists between the level of business executives' familiarity with ASD and their views abouth whether or not people with ASD are or are not well educated, $X^2(2) = 1.078, p < .583$.

Table 12

Chi Square Analysis: Familiarity & Well Educated

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	34 (24.5)	8 (5.8)	42 (30.3)
Somewhat Familiar	52 (37.4)	12 (8.6)	64 (46.0)
Not Familiar/Not at all Familiar	24 (17.3)	9 (6.5)	33 (23.8)
Total	**110 (79.2)**	**29 (20.9)**	**139 (100.1)**

$X^2(2) = 1.078, p < .583$

Work Quality: Eye Contact

Making good eye contact is the next quality being analyzed with the level of familiarity with ASD. This analysis looked at business executive's level of familiarity with people who have ASD and whether or not they believe these individuals make good eye contact. A 2 (exhibit) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was a statistically significant association between exhibits and familiarity. Of the 142 respondents, the vast majority (78.1%) reported that individuals with ASD do not make good eye contact no matter their familiarity with ASD (see Table 13). The Pearson chi-square analysis results were not statistically significant, showing there is not an association between a business executive's level of familiarity with ASD and whether or not they believe people with ASD make good eye contact, $X^2(2) = 1.816, p < .403$.

Table 13

Chi Square Analysis: Familiarity & Eye Contact

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	7 (4.9)	35 (24.7)	42 (29.6)
Somewhat Familiar	14 (9.9)	52 (36.6)	66 (46.5)
Not Familiar/Not at all Familiar	10 (7.0)	24 (16.9)	34 (23.9)
Total	**31 (21.8)**	**111 (78.2)**	**142 (100)**

$X^2(2) = 1.816, p < .403$

Work Quality: Focus

There were 138 respondents who endorsed both familiarity and the capacity of individuals with ASD to focus on a specific task that is given to them. A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was a statistically significant association between whether or not they exhibit the quality and familiarity. Responses were nearly evenly split regarding focus. Specifically, 57.2% of respondents suggested individuals with ASD can effectively focus on their work and 42.7% reported that they did not. The Pearson chi-square analysis resulted in no statistical significance, suggesting the no association exists between the level of familiarity with ASD of business executives and whether or not they believe people with ASD are able to focus on a specific given task, *$X^2 (2) = .155, p < .925$.*

Table 14

Cross Tabulation: Familiarity & Focus

Familiarity	Do Exhibit n (%)	Do not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	24 (17.4)	18 (13.0)	42 (30.4)
Somewhat Familiar	37 (26.8)	26 (18.8)	63 (45.6)

Not Familiar/Not at all Familiar	18 (13.0)	15 (10.9)	33 (23.9)
Total	**79 (57.2)**	**59 (42.7)**	**138 (99.9)**

X^2 (2) =.155, p<.925

Work Quality: Honesty

The next quality being analyzed with the level of familiarity with ASD is the quality of being honest. Of the 139 respondents to complete this survey question, all (100.0%) respondents, no matter their level of familiarity with ASD, reported that people with ASD exhibit the quality of being honest. Therefore, a cross-tabulation table and Pearson chi-square is not necessary.

Work Quality: Independence

One hundred thirty-eight respondents endorsed both familiarity and the quality of independence in individuals with ASD. A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was a statistically significant association between whether or not they exhibit the quality and familiarity. Respondents were slightly more likely to report that individuals with ASD did not have the work quality of independence (59.5%) than those who reported they believed individuals with ASD could work independently (40.5%). The Pearson chi-square analysis showed no statistical significance, suggesting no association between the level of familiarity with ASD of business executives and whether or not they believe people with ASD can work independently, *X^2 (2) = 4.852, p<.084.*

Table 15

Chi Square Analysis: Familiarity and Independence

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	19 (13.8)	22 (15.9)	41 (29.7)

Somewhat Familiar	43 (31.2)	20 (14.5)	63 (45.7)
Not Familiar/Not at all Familiar	20 (14.5)	14 (10.1)	34 (24.6)
Total	**82 (59.5)**	**56 (40.5)**	**138 (100.0)**

X^2 (2) =4.952, p<.084

Work Quality: Logic

There were 139 respondents who endorsed both familiarity and whether or not people with ASD use logic to problem solve. A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was a statistically significant association between whether or not they exhibit the quality and familiarity. The data show that 79.1% of the respondents believe that individuals with ASD use logic to problem solve. The Chi Square analysis results showed there is no statistical significance between a business executive's level of familiarity with ASD and whether or not they believe people with ASD use logic to problem solve, *X^2 (2) =.866, p<.649*. In other words, there is not an association between the two variables of familiarity and using logic to problem solve.

Table 16

Chi Square Analysis: Familiarity & Logic

Familiarity	Do Exhibit n (%)	Do not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	33 (23.7)	8 (5.8)	41 (29.5)
Somewhat Familiar	52 (37.4)	12 (8.6)	64 (46.0)
Not Familiar/Not at all Familiar	25 (18.0)	9 (6.5)	34 (24.5)
Total	**110 (79.1)**	**29 (20.9)**	**139 (100.0)**

X^2 (2) =.866, p<.649

Work Quality: Social

There were 139 respondents who endorsed both familiarity and the quality of being able to behave in socially acceptable ways in individuals with ASD. A 2 (exhibits) by 3 (familiarity) Pearson chi-square analysis was completed to determine whether there was a statistically significant association between whether or not they exhibit the quality and familiarity. The vast majority (77.0%) of respondents reported that behaving in socially acceptable ways was a problem for individuals with ASD (see Table 17). The Pearson chi-square analysis showed no statistical significance, suggesting no association exists between the level of business executives' familiarity with ASD and whether or not they believe people with ASD behave in socially acceptable ways, X^2 *(2) =.302, p<.860.*

Table 17

Chi Square Analysis: Familiarity & Social

Familiarity	Do Exhibit n (%)	Do Not Exhibit n (%)	Total n (%)
Very Familiar/Familiar	9 (6.5)	32 (23.0)	41 (29.5)
Somewhat Familiar	14 (10.1)	50 (36.0)	64 (46.1)
Not Familiar/Not at all Familiar	9 (6.5)	25 (18.0)	34 (24.5)
Total	**32 (23.1)**	**107 (77.0)**	**139 (100.1)**

X^2 *(2) =.274, p<.860*

The second series of research questions center around the topic of work qualities. Specific research questions include:

a. To what extent do female and male business executives rate preferred qualities as important in prospective employees?
b. Do the ratings of preferred prospective employee qualities vary across the sexes?

c. Do business executives believe that individuals with ASD exhibit positive work qualities?

The purpose of the second series of research questions was to determine the extent to which business executives rate preferred qualities in prospective employees, whether those ratings vary across the sexes, and whether or not they believe that individuals with ASD exhibit those preferred work qualities. If business executives recognize preferred qualities in prospective employees, would they find the same characteristics in individuals with ASD? If so, they may be open to hiring individuals with ASD.

The question regarding the sex of the business executive was asked to see if the data supports the theory that female business executives are more likely to hire individuals with disabilities, as has been suggested in previous research (Hampton & Sharp, 2014; Jones & Stone, 1995; Laws & Kelly, 2005; Thomas et al., 2007). If the sex of the business executive individual is shown to make an impact on the hiring of individuals with ASD, it may be worthwhile for individuals with ASD to seek out opportunities to work with female business executives. Finally, if business executives believe individuals with ASD exhibit positive work qualities, they may be more likely to hire these individuals.

Preferred Qualities

There were 151 Rotary Club respondents for this survey question. Responses to this survey question was used to evaluate whether the sex of the business executive had any statistical association with rating of preferred qualities in prospective employees. There were ten qualities evaluated in this survey with the following rating scale: Crucial, Very Important, Important, Somewhat Important, and Unimportant.

Ability

Respondents were asked to select the importance of being capable in prospective employees. Of the 150 respondents, 96 (64.0%) were male and 54 (36.0%) were female. Not surprisingly, the majority of respondents reported that being capable was crucial (46%) or very important (36.7%) with only 15.3% reporting this quality as important and 2% indicating capability was only somewhat important. There were no respondents that used the category of unimportant for this quality.

Of the 150 respondents, all participants reported some level of importance in regards to employees being capable. Given the overwhelming majority of respondents reported being capable was a valuable quality (82.7% - Crucial and Very Important) and a small percentage indicated Somewhat Important (see Table 18), the association between the preferred quality of ability and the sex of the respondent was not explored with a chi square analysis. The assumption of a Pearson chi-square was violated because less than two percent of respondents indicated the quality of being capable was somewhat important or unimportant

Table 18

Cross Tabulation: Sex & Preferred Qualities - Ability

Importance	Male (%)	Female (%)	Total (%)
Crucial	41 (42.7)	28 (51.9)	69 (46.0)
Very Important	37 (38.5)	18 (33.3)	55 (36.7)
Important	15 (15.6)	8 (14.8)	23 (15.3)
Somewhat Important	3 (3.1)	0 (0)	3 (2.0)
Total	**96 (99.9)**	**54 (100.0)**	**150 (100.0)**

Punctual/Good Attendance

Respondents were asked to select the importance of being punctual or having good attendance in prospective employees. Of the 150 respondents, 96 (64.0%) were male and 54 (36.0%) were female. All respondents reported some level of importance for employees who are punctual or have good attendance. The two highest levels of importance received the majority (87.3%) of responses for both male and female business executives (see Table 19). No chi-square analysis was run to determine the association between the preference for the punctuality /good attendance and the sex of the respondent because less than one percent of respondents indicated the quality was only somewhat important or unimportant and the distribution across levels of importance resulted in a violation of the assumptions for a chi square.

Table 19

Cross Tabulation: Sex & Preferred Qualities - Punctual/Good Attendance

Importance	Male (%)	Female (%)	Total (%)
Crucial	36 (37.5)	23 (42.6)	59 (39.3)
Very Important	47 (49)	25 (46.3)	72 (48.0)
Important	12 (12.5)	6 (11.1)	18 (12.0)
Somewhat Important	1 (1.0)	0 (0)	1 (.7)
Total	**96 (100)**	**54 (100)**	**150 (100.0)**

Attention to Detail

There were 151 respondents who reported their beliefs about the importance of attending to detail.. All respondents reported some importance for attending to detail and 87.4% reported that attending to detail is most important (see Table 20). The vast majority (86.6%) of males agree the quality of paying attention to detail is either crucial or very important. Similarly,

88.9% of female respondents agreed the quality of paying attention to detail is either crucial or very important. However, the relationship between the preferred quality of paying attention to detail and the sex of the respondent was not explored with a Pearson chi-square analysis because (a) less than one percent of respondents indicated the preferred quality of paying attention to detail was either somewhat important or unimportant and (b) the distribution of "paying attention to detail" endorsements across levels of importance resulted in a violation of the assumptions for a chi square.

Table 20

Cross Tabulation: Sex & Preferred Qualities - Attention to Detail

Importance	Male (%)	Female (%)	Total (%)
Crucial	36 (37.1)	25 (46.3)	61 (40.4)
Very Important	48 (49.5)	23 (42.6)	71 (47.0)
Important	13 (13.4)	5 (9.3)	18 (11.9)
Somewhat Important	0 (0)	1 (1.9)	1 (.7)
Total	**97 (100)**	**54 (100.1)**	**151 (100.0)**

Communication

There were 151 respondents who reported the level of importance they find for their employees to be able to communicate clearly. Of the 151 respondents, 97 (64.2%) were male and 54 (35.8%) were female. All respondents reported some level of importance for their employees to be able to communicate clearly. There were no respondents who thought this quality was unimportant and few thought this was only somewhat important. The vast majority

(88.1%) of respondents reported this quality was either crucial or very important (see Table 21). Although a significant number of respondents indicated a high level of importance for the preferred quality of being able to communicate clearly, the relationship with the sex of the respondent was not explored with a Pearson chi-square analysis because less than two percent of the respondents indicated this quality was either somewhat important or unimportant and the distribution across levels of importance resulted in a violation of the assumptions for a chi square.

Table 21

Cross Tabulation: Sex & Preferred Qualities - Communication

Importance	Male (%)	Female (%)	Total (%)
Crucial	43 (44.3)	28 (51.9)	71 (47.0)
Very Important	40 (41.2)	22 (40.7)	62 (41.1)
Important	12 (12.4)	4 (7.4)	16 (10.6)
Somewhat Important	2 (2.1)	0 (0)	2 (1.3)
Total	**97 (100)**	**54 (100)**	**151 (100)**

Education

Respondents were asked to select the importance of being well educated in prospective employees. Of the 151 respondents, who reported the level of importance they place on education, 1.3% felt this quality is unimportant meaning 98.7% of respondents believe there is some form of importance placed on being well educated (see Table 22). The relationship between the preferred quality of being well educated and the sex of the respondent was not

explored with a Pearson chi-square analysis because (a) less than two percent of respondents indicated the quality of having a good education was unimportant and (b) the distribution of having a good education across levels of importance resulted in a violation of the assumptions for a chi square.

Table 22

Cross Tabulation: Sex & Preferred Qualities - Education

Importance	Male (%)	Female (%)	Total (%)
Crucial	14 (14.4)	6 (11.1)	20 (13.3)
Very Important	26 (26.8)	15 (27.8)	41 (27.2)
Important	42 (43.3)	23 (42.6)	65 (43.0)
Somewhat Important	13 (13.4)	10 (18.5)	23 (15.2)
Unimportant	2 (2.1)	0 (0)	2 (1.3)
Total	**97 (100)**	**54 (100)**	**151 (100)**

Focus

Respondents were asked to select the importance of being able to remain focused on a given task in prospective employees. The respondents varied with their responses for this quality; however, all (100%) place some importance on the ability of their employees to be able to remain focused on a given task and almost no respondents report it to be only somewhat important (see Table 23). The relationship between being able to focus on a given task and the sex of the respondent was not explored with a Pearson chi-square analysis because less than two percent of respondents indicated being able to focus on a given task was either somewhat

important or unimportant. The distribution of being able to focus on a given task endorsements across levels of importance resulted in a violation of the assumptions for a chi square.

Table 23

Cross Tabulation: Sex & Preferred Qualities - Focus

Importance	Male (%)	Female (%)	Total (%)
Crucial	24 (25.0)	19 (35.2)	43 (28.7)
Very Important	47 (49.0)	23 (42.6)	70 (46.6)
Important	24 (25.0)	12 (22.2)	36 (24.0)
Somewhat Important	1 (1.0)	0 (0)	1 (.7)
Total	**96 (100)**	**54 (100)**	**150 (100)**

Honesty

The quality of honesty was evaluated by the respondents using only three of the importance categories in this analysis; Crucial, Very Important, and Important; meaning the quality of honesty is rated very high in importance by all respondents – male and female alike (see Table 24). A Pearson chi-square analysis was not used to explore the relationship between the preferred quality of being honest and the sex of the respondent because there were no respondents who indicated the quality was either somewhat important or unimportant. Also, the distribution of being honest endorsements across levels of familiarity resulted in a violation of the assumptions for a chi square.

Table 24

Cross Tabulation: Sex & Preferred Qualities - Honesty

Importance	Male (%)	Female (%)	Total (%)
Crucial	75 (77.3)	41 (75.9)	116 (76.9)
Very Important	19 (19.6)	9 (16.7)	28 (18.6)
Important	3 (3.1)	4 (7.4)	7 (4.7)
Total	**97 (100)**	**54 (100)**	**151 (100.2)**

Independence

There were 151 respondents, 97 (64.2%) were male and 54 (35.8%) female who reported the importance they place on independence in prospective employees. This data shows that nearly all respondents, 95.9% of male business executives and 96.3% of female business executives, determined the quality of being independent falls within the important categories (see Table 25). The relationship between the preferred quality of being independent and the sex of the respondent was not explored with a Pearson chi-square analysis because (a) less than five percent of respondents indicated the preferred quality of independence was only somewhat important and (b) the distribution of independence endorsement across levels of importance resulted in a violation of the assumptions for a chi square.

Table 25

Cross Tabulation: Sex & Preferred Qualities - Independence

Importance	Male (%)	Female (%)	Total (%)
Crucial	19 (19.6)	16 (29.6)	35 (23.2)
Very Important	54 (55.7)	23 (42.6)	77 (51.0)
Important	20 (20.6)	13 (24.1)	33 (22.0)

Somewhat Important	4 (4.1)	2 (3.7)	6 (4.0)
Total	**97 (100)**	**54 (100)**	**151 (100.2)**

Logic

The majority of the 151 respondents (49.5% male and 35.2% female) reported the level of importance of being able to use logic to problem solve is very important in prospective employees, but there were no respondents who reported this quality is unimportant and few viewed the use of logic as only somewhat important (see Table 26). The distribution of being able to use logic to problem solve endorsements across levels of importance resulted in a violation of the assumptions for a chi square. For this reason, the relationship between the sex of the respondent and the preferred quality of using logic to problem solve was not explored with a Pearson chi-square analysis.

Table 26

Cross Tabulation: Sex & Preferred Qualities - Logic

Importance	Male (%)	Female (%)	Total (%)
Crucial	21 (21.6)	20 (37.0)	41 (27.2)
Very Important	48 (49.5)	19 (35.2)	67 (44.4)
Important	23 (23.7)	14 (25.9)	37 (24.5)
Somewhat Important	5 (5.2)	1 (1.9)	6 (4.0)
Total	**97 (100)**	**54 (100)**	**151 (100.1)**

Social

All but one respondent (99.3%) reported they believe there is some level of importance to be placed on their employees behaving in socially acceptable ways. The highest rates of importance from the 151 respondents were in the categories of very important and important with a total of 68.2% (see Table 27). The relationship between the preferred quality of behaving in socially acceptable ways and the sex of the respondent was not explored with a Pearson chi-square analysis because less than one percent of respondents indicated that the preferred quality of behaving in socially acceptable ways was unimportant and the distribution of endorsements across levels of importance resulted in a violation of the assumptions for a chi-square.

Table 27

Cross Tabulation: Sex & Preferred Qualities - Social

Importance	Male (%)	Female (%)	Total (%)
Crucial	12 (12.4)	11 (20.4)	23 (15.2)
Very Important	40 (41.2)	16 (29.6)	56 (37.1)
Important	30 (30.9)	17 (31.5)	47 (31.1)
Somewhat Important	14 (14.4)	10 (18.5)	24 (15.9)
Unimportant	1 (1.0)	0 (0)	1 (0.7)
Total	**97 (99.9)**	**54 (100)**	**151 (100)**

People with ASD and preferred work Qualities

An analysis of whether or not business executives identified specific qualities in people with ASD took place next. The variables of an individual's sex and identifying whether business executives believe people with ASD have specific qualities were examined.

Ability

There were 137 respondents who endorsed items related to whether or not individuals with ASD are capable and the sex of business executives. The vast majority (94.9%) of respondents reported people with ASD are able individuals, with 100% of female respondents reporting they believe individuals with ASD are capable (see Table 28). However, the relationship between whether individuals with ASD exhibit the preferred quality of being capable and the sex of the respondent was not explored with Pearson chi-square because (a) only about five percent of respondents indicated individuals with ASD are not able individuals and no female business executive reported this belief and (b) the distribution of endorsements across categories resulted in a violation of the assumptions for a chi square.

Table 28

Cross Tabulation: Sex & ASD - Ability

Quality	Male (%)	Female (%)	Total (%)
People with ASD are able individuals	79 (91.9)	51 (100)	130 (94.9)
People with ASD are not able individuals	7 (8.1)	0 (0)	7 (5.1)
Total	**86 (100)**	**51 (100)**	**137 (100.0)**

Punctual/Attendance

There were 137 respondents who endorsed items related to whether or not individuals with ASD are punctual and have good attendance and the sex of business executives. The vast majority (91.3%) of respondents, both male and female, reported they believe people with ASD are punctual and have good attendance (see Table 29). The relationship between whether or not

individuals with ASD are punctual or have good attendance and the sex of the respondent was not explored because the distribution across categories resulted in a violation of the assumptions for a Pearson chi-square.

Table 29

Cross Tabulation: Sex & ASD - Punctual/Good Attendance

Quality	Male (%)	Female (%)	Total (%)
People with ASD are Punctual/Have good attendance	76 (88.4)	49 (96.1)	125 (91.2)
People with ASD are not Punctual/Have good attendance	10 (11.6)	2 (3.9)	12 (8.8)
Total	**86 (100)**	**51 (100)**	**137 (100)**

Attention to Detail

There were 138 respondents who endorsed items related to whether or not individuals with ASD pay attention to detail and the sex of business executives. A 2 (sex) by 2 (attention to detail) Pearson chi-square analysis was completed to determine whether there is a statistically significant association between the sexes and familiarity. Again, the vast majority (85.5%) of respondents believe that individuals with ASD pay attention to detail (see Table 30); however, the assumptions of a Pearson chi-square were not violated. The results of the Pearson chi-square analysis shows there is not a statistically significant association between a business executive's sex and their evaluation of whether or not people with ASD pay attention to detail, X^2 *(1) =1.602, p<.206.*

Table 30

Chi Square Analysis: Sex & ASD – Attention to Detail

Quality	Male (%)	Female (%)	Total (%)
People with ASD pay attention to detail	71 (82.6)	47 (90.4)	118 (85.5)
People with ASD do not pay attention to detail	15 (17.4)	5 (9.6)	20 (14.5)
Total	**86 (100)**	**52 (100)**	**138 (100)**

$X^2(1) = 1.602, p < .206$

Communicates Clearly

There were 139 respondents who endorsed items related to whether or not individuals with ASD communicate clearly and the sex of the business executive. A 2 (sex) by 2 (attention to detail) Pearson chi-square analysis was completed to determine wheterh there is a statistical significant association between the sexes and paying attention to detail. Slightly more than one-fourth (25.9%) of the respondents believe individuals with ASD communicate clearly while 74.1% of all respondents reported people with ASD do not communicate clearly (see Table 31). The results of the Pearson chi-square analysis determined there is no statistical significance between the sex of the respondent and determining whether or not business executives believe people with ASD are able to communicate clearly, $X^2 (1) = 1.027, p < .311$.

Table 31

Chi Square Analysis: Sex & ASD - Communicates Clearly

Quality	Male (%)	Female (%)	Total (%)
People with ASD communicate clearly	20 (23.0)	16 (30.8)	36 (25.9)

People with ASD do not communicate clearly	67 (77.0)	36 (69.2)	103 (74.1)
Total	**87 (100)**	**52 (100)**	**139 (100.0)**

$X^2(1) = 1.027, p < .311$

Well Educated

There were 138 respondents who endorsed items related to whether or not individuals with ASD are well educated and the sex of business executives. A 2 (sex) by 2 (education) Pearson chi-square analysis was completed to determine whether there is a significant association between the sexes and education. The data are very similar between both male and female business executives with the vast majority (79%) reporting that individuals with ASD are well educated (see Table 32). The Pearson chi-square analysis determined there is no statistical significance between the sex of business executives and determining whether or not they believe people with ASD are well educated, *$X^2 (1) = 1.593, p < .207$.*

Table 32

Chi Square Analysis: Sex & ASD - Education

Quality	Male (%)	Female (%)	Total (%)
People with ASD are well educated	65 (75.6)	44 (84.6)	109 (79.0)
People with ASD are not well educated	21 (24.4)	8 (15.4)	29 (21.0)
Total	**86 (100)**	**52 (100)**	**138 (100.0)**

$X^2(1) = 1.593, p < .207$

Eye Contact

There were 140 business executives that endorsed items related to whether or not individuals with ASD make good eye contact and the sex of business executives. A 2 (sex) by 2 (eye contact) Pearson chi-square analysis was completed to determine whether there is a statistical significant association between the sexes and whether or not people with ASD make good eye contact. The vast majority, both male and female, of respondents reported that people with ASD do not have good eye contact (see Table 33). According to the Pearson chi-square analysis, there is no statistically significant association between sex and determining whether or not business executives believe that people with ASD have good eye contact, X^2 *(1) =2.703, p<.100.*

Table 33

Chi Square Analysis: Sex & ASD - Eye Contact

Quality	Male (%)	Female (%)	Total (%)
People with ASD have good eye contact	15 (17.0)	15 (28.8)	30 (21.4)
People with ASD do not have good eye contact	73 (83.0)	37 (71.2)	110 (78.6)
Total	**88 (100)**	**52 (100)**	**140 (100)**

$X^2(1) =2.703, p<.100$

Focus

One hundred thirty-six business executives endorsed items related to individuals with ASD being able to focus on a given task and the sex of the business executive. A 2 (sex) by 2 (focus) Pearson chi-square analysis was completed to determine whether there is a statistical significant association between the sexes and focus. Female business executives were likely to

report that people with ASD are able to focus on work tasks (70.6%). In contrast, the majority (50.6%) of male business executives reported individuals with ASD are not able to focus (see Table 34). Based on the Pearson chi-square analysis, there is a statistically significant relationship between the variables of sex and business executives views about the capacity of people with ASD to focus on a given task, $X^2 (1) = 5.844, p > .016$. That is, female business executives are more likely to believe individuals with ASD can focus on work tasks than male executives.

Table 34

Chi Square Analysis: Sex & ASD - Focus

Quality	Male (%)	Female (%)	Total (%)
People with ASD are able to focus	42 (49.4)	36 (70.6)	78 (57.4)
People with ASD are not able to focus	43 (50.6)	15 (29.4)	58 (42.6)
Total	**85 (100)**	**51 (1)**	**136 (100.0)**

$X^2(1) = 5.844, p > .016$

Honesty

There were 138 respondents who endorsed items related to whether or not individuals with ASD are honest. All respondents (100%) reported that people with ASD are honest, both male and female alike. As a result, further analysis was unwarranted.

Independence

Whether or not individuals with ASD are independent was evaluated by 136 business executives. A 2 (sex) by 2 (independence) Pearson chi-square analysis was completed to determine whether there is a statistical significant association between the sexes and

independence of individuals with ASD. More than half (59.6%) of all respondents, male and female alike, reported that people with ASD are independent (see Table 35). The results of the Pearson chi-square analysis showed there is no statistical significance between the sex of the business executive and beliefs about whether or not people with ASD are independent, X^2 *(1) =.051, p<.822.*

Table 35

Chi Square Analysis: Sex & ASD - Independence

Quality	Male (%)	Female (%)	Total (%)
People with ASD are independent	50 (58.8)	31 (60.8)	81 (59.6)
People with ASD are not independent	35 (41.2)	20 (39.2)	55 (40.4)
Total	**85 (100)**	**51 (100)**	**136 (100.0)**

$X^2(1) =.051, p<.822$

Logic

There were 137 respondents who endorsed whether or not individuals with ASD use logic to problem solve and the sex of business executives. The vast majority (79.6%) of respondents believe people with ASD use logic to problem solve (see Table 36). The Pearson chi-square analysis showed there is no statistical significance between sex and business executives' beliefs about people with ASD capacity to use logic to problem solve, X^2 *(1) =.359, p<.549.* The two variables are independent of one another.

Table 36

Chi Square Analysis: Sex & ASD - Logic

Quality	Male (%)	Female (%)	Total (%)
People with ASD use logic to problem solve	69 (81.2)	40 (76.9)	109 (79.6)
People with ASD do not use logic to problem solve	16 (18.8)	12 (23.1)	28 (20.4)
Total	**85 (100)**	**52 (100)**	**137 (100)**

$X^2(1) = .359, p < .549$

Social

There were 137 respondents who endorsed whether or not individuals with ASD behave in socially acceptable ways and the sex of business executives. A 2 (sex) by 2 (social) Pearson chi-square analysis was completed to determine whether there is a statistically significant association between the sexes and the social skills of individuals with ASD. The vast majority of respondents, no matter their sex, reported that people with ASD do not behave in socially acceptable ways (see Table 37). The Pearson chi-square analysis showed there is no statistical relationship between the sex of the individual and business executives' beliefs about whether or not people with ASD are able to behave in socially acceptable ways (i.e., they are independent of one another, *$X^2 (1) = 1.298, p < .255$.*

Table 37

Chi Square Analysis: Sex & ASD - Social

Quality	Male (%)	Female (%)	Total (%)
People with ASD behave in socially acceptable ways	17 (19.5)	14 (28.0)	31 (22.6)
People with ASD do not behave in socially	70 (80.5)	36 (72.0)	106 (77.4)

acceptable ways			
Total	**87 (100)**	**50 (100)**	**137 (100)**

$X^2(1) = 1.298, p < .255$

Chapter Summary

The results of the analyses were presented in this chapter alongside the survey items and research questions. Brief descriptive data were presented in narrative form as well as table form. The data from the analyses were statistically significant for only a few of the variables examined. The majority of Pearson chi-squre analyses could not be completed due to a consistent violation of the assumptions for this statistical analysis. The fact that so few business executives, irrespective of their sex, held different views about people with ASD is noteworthy. Further discussion can be found in Chapter 5.

Chapter 5

Discussion

This study presents survey data regarding business executives and their familiarity of ASD, connection to people with disabilities and ASD, important qualities in prospective employees, and self-reporting of the qualities they believe that people with ASD may/may not have. The current chapter provides a more in depth discussion of the results of the research questions with regard to the survey questions, the limitations of the study, and recommendations for future research.

The unemployment rate of the United States was as high as 9.3% in 2010 and has been steadily improving for the general population; however, the unemployment rate for individuals with disabilities has not seen great improvement. As of 2013, individuals with disabilities are still considered the sub-group with the highest rate of unemployment at 66.1%. Early research by Jones and Stone (1995) suggested females are more likely to hire and work alongside people with disabilities. In contrast, males are more likely to reject people with disabilities (Werner & Davidson, 2004). However, according to the research of Hampton and Sharp (2014), the gap is decreasing between the sexes. This project looked at business executives, their sex, their familiarity with ASD, qualities thought to be of importance in an employee, and whether or not business executives believe people with ASD exhibit the qualities of importance. If the differences across sexes held true with respect for individuals with ASD, then a way to possibly improve this outcome for individuals with ASD would be to work with females business

executives. However, if the gap between the sexes was, in fact, closing, then no particular benefit to seeking employment from female executives would be likely for individuals with ASD.

Do business executives self-report significant familiarity with characteristics of ASD?

There is no previous study to determine the business executives' familiarity with ASD, therefore these data begin to explore this topic. Approximately 26.8% self-reported being Very Familiar/Familiar with ASD (i.e., knowing at least one characteristics of ASD and being able to answer questions about ASD). The largest percentage (43.3%) of respondents self-reported being Somewhat Familiar (i.e., knowing at least one characteristic of ASD). Approximately 28% of respondents self-reported being Not Familiar/Not at all Familiar (i.e., having merely heard of ASD/never heard of ASD). The results for this study determined that most business executives are only Somewhat Familiar with ASD. Allowing for anonymity for business executives to self-report their familiarity may have resulted in more accurate findings. These results suggest that although many business executives have at least some familiarity with ASD, more than a quarter of business executives have little or no familiarity of ASD. The implication of this finding is that additional work should be done to educate individuals in the hiring role about ASD to increase the likelihood individuals with ASD may become employed. Providing on-site training services through "demand-side employment services" allows the training professionals to determine the specific needs of the organization, discuss a partnership between the organization and providers working with individuals with disabilities (Unger, 2007). The United States Business Leadership Network (USBLN) is a support organization that works toward hiring, retaining, and marketing to people with disabilities through partnerships (Unger, 2007). Furthermore, increasing the amount and type of training through human resources to

educate individuals in the workplace is helpful. Another way to train business executives is to allow the individual with ASD to speak face-to-face with the employer to discuss the prospective employer needs. Educating individuals with ASD regarding whether or not to self-disclose is also an area of needed training. This training would take place with the individual and their job coach or employment specialist. The job coach or employmenet specialist would want to review what should be said when self-disclosure occurs. In addition, individuals with ASD would need assistance learning when and to whom to self-disclose.

Are female business executives more familiar with characteristics of ASD than males?

No previous research has examined the relationship between sex of business executives and familiarity with ASD. The only related research findings have been that females are more likely to hire and work alongside people with disabilities (Jones & Stone, 1995), and males are more likely to reject them (Werner & Davidson, 2004). But the gap between the sexes may be weakening (Hampton & Sharp, 2014). With this new information, the current study sought to test the hypothesis regarding the gap between the sexes decreasing or whether females continue to be more willing to work with people with disabilities. Female business executives did report a higher level of familiarity with ASD than male business executives. More than one-third of female business executives self-reported being Very Familiar/Familiar with ASD (35.2%). In comparison, 23.7% of male business executives self-reported being Very Familiar/Familiar with ASD. Furthermore, 50% of female and 40.2% of male business executives self-reported being Somewhat Familiar with ASD. This suggests that female business executives are still slightly more familiar with characteristics of ASD than male business executives. However, only if female business executives consistently viewed the work qualities of individuals with ASD more

favorably would this have a significant implication for work training programs for individuals with ASD. In the absence of these clear outcomes, it would be imprudent to encourage employment training programs to teach individuals with ASD to seek interviews specifically with female business executives. However, the individual with ASD will find it beneficial to advocate for themselves regarding their areas of strength. If they educate the employer about the areas in which they excel, they may increase the likelihood of employment. For example, business executives want employees who focus on their work and do not become distracted by office politics. The individual with ASD who self-discloses should stress their capacity to maintain focus and attend to detail in lieu of excessively engaging in social interactions. Thus, productivity could be improved.

Without having specific statistics in earlier research, it is hard to determine if these data show significant changes between the sexes. Given previous research did not report familiarity based on sex, the current data serve as a baseline for further research to determine if there truly is a sex difference in the familiarity of ASD and whether the gap between sexes is decreasing. However, despite intensive efforts to recruit participants and the brief nature of the survey (e.g., most respondents completed the survey in less than 15 minutes), a relatively small number of business executives responded to the survey. Additional research that involves a larger sample of business executives may be necessary to confirm these outcomes.

Do business executives who self-report lower levels of familiarity with ASD also identify fewer favorable work qualities among individuals with ASD?

No previous research has examined business executives' familiarity with ASD and beliefs about work qualities among individuals with ASD. This study is the first to analyze these variables.

The levels of familiarity that were used in this study were a) Very Familiar/Familiar, b) Somewhat Familiar, and c) Not Familiar/Not at all Familiar. The purpose of this research question was to ascertain whether business executives who self-report lower levels of familiarity with ASD also identified fewer favorable work qualities among this population. Of the eleven preferred qualities examined, there was no specific quality that was statistically significant between the level of familiarity with ASD and beliefs about those qualities. The level of familiarity does not appear to be related to business executive's views about favorable work qualities among individuals with ASD.

It is noteworthy, however, that the relationship between familiarity and work qualities could not always be explored due to a violation of the assumptions for a Pearson chi-square due to the extremely low number of respondents falling into cells suggesting that individuals with ASD do not exhibit a specific work quality. For example, the vast majority of respondents reported that individuals with ASD were capable and punctual so further analyses was not warranted. Although the relationship between familiarity and work qualities could not be examined in these cases, the finding that the majority of business executives believe individuals with ASD are capable and punctual is a positive outcome. The implication of this finding is that business executives will not hold negative views about capability and punctuality among individuals with ASD, irrespective of familiarity. Further, when the relationship between familiarity and work qualities was explored, they were consistently non-significant. The majority of business executives surveyed reported that individuals with ASD paid close attention to detail, were well-educated and were logical. These findings also have positive implications for employment possibilities for individuals with ASD. However, a limitation of the current

analyses is that of having Rotary Club members serve as respondents. The Rotary Club is a service organization which may have skewed the results in a more favorable direction.

Business executives' endorsement of qualities were not universally favorable, however. The majority of respondents believed that individuals with ASD do not communicate clearly, make eye contact, or are social people. Although these views may mean that business executives are less likely to hire individuals with ASD, these characteristics are consistent with the defining features of ASD and do not represent a bias against this population. Lastly, slightly more respondents report that individuals with ASD are not able to focus on work tasks and cannot work independently than those that do not hold these beliefs. These work qualities are not consistently associated with a diagnosis of ASD. Therefore, employment programs may wish to (a) teach business executives that these are not necessarily limitations they should expect among individuals with ASD and (b) teach individuals with ASD to discuss their capacity to work independently and in a focused manner during their interviews.

A limitation of the current study is that a relatively low number of respondents completed the survey. As a result, these outcomes should be interpreted with caution. However, given the overwhelming percentage of respondents endorsing favorable or unfavorable impressions regarding most work qualities, the likelihood that different outcomes would emerge seem somewhat unlikely in most cases.

To what extent do female and male business executives rate preferred qualities as important in prospective employees?

Previous research suggested that women are more likely to hire individuals with disabilities and have more positive attitudes toward individuals with disabilities (Jones & Stone, 1995; Thomas,

Vaughn and Doyle, 2007). However, males have a greater negative regard toward individuals with disabilities (Hampton & Sharp, 2014; Laws & Kelly, 2005). According to this research, the gap between male and female business executives is narrowing. When asked to rate the importance of specific work qualities, respondents were asked to use a Likert scale including: Crucial, Very Important, Important, Someewhat Important, and Unimportant. The scale was intentionally skewed toward some level of importance because it seemed unlikely that business executives would identify the specific qualities at multiple levels of unimportant. In fact, only two of the preferred qualities had any respondents indicate that the quality was unimportant. Specifically, the quality of being well educated was rated as unimportant by only 1.3% of respondents and the quality of behaving in socially acceptable ways was rated as unimportant less than one percent (.7%). The results from this analysis shows business executives, no matter the sex, determined the qualities listed to be important. The purpose for evaluating whether or not business executives viewed these qualities as important was because we needed to confirm these variables were consistently viewed as important to business executives

The fact that business executives find these qualities to be important is beneficial for individuals with ASD and training facilities that will assist these individuals with the soft skills needed for competitive employment opportunities. The characteristics that were found to be most important can be the focus of training facilities as they work with individuals with ASD in hopes of providing opportunities for them to practice these skills and improve on them personally, with the outcome being a higher level of competitive employment. Rogers et al., (2008) describe the importance of using the strengths of the individual to improve outcomes for the individual and the employer. Once practiced, the skills learned may become strengths for the individual with ASD and can improve the likelihood of competitive employment for them. With

these data in mind, these training programs can teach individuals with ASD to emphasize their strengths regarding these specific qualities.

As noted previously, the number of respondents is relatively low given the intensive efforts made to recruit survey participants and this represents a limitation of the current analyses. However, given the specific qualities assessed reflect those frequently required in the workplace, it is unlikely that a different sample would have identified these qualities as unimportant.

Do the ratings of preferred prospective employee qualities vary across the sexes?

Earlier research determined that females are more likely to hire and work alongside individuals with disabilities (Hampton & Sharp, 2014; Jones & Stone, 1995; Laws & Kelly, 2005) and Werner and Davidson (2004) reported that males were far less likely to work with individuals with disabilities. Yet Hampton and Sharp (2014) noted the gap between the sexes was decreasing. The previous research caused this researcher to analyze whether there is a difference between sexes. The results generallydemonstrate there is no statistical significance between sex, which supports the claim from Hampton and Sharp that the gap between the sexes is decreasing. However, a statistically significant difference emerged on the varibles of focus. That is, female business executives were more likely to report that individuals with ASD were able to focus on work tasks; whereas male business executives were more likely to report that individuals with ASD were unable to focus on work tasks. The implication of this finding is that individuals with ASD who are interviewing with a male business executive may need to particularly emphasize their capacity to focus on their work in the workplace. In fact, some individuals with ASD may be able to describe themselves as "being more highly focused on their work than other job applicants because they will not get distracted by social activities in the workplace." This is a

way to acknowledge the likelihood that they are not as social as other employees but that this can be turned into a strength.

What does the limited difference across the sexes mean for individuals with ASD? The general lack of findings with respect to sex suggests that training programs should not spend their limited resources in identifying female business executives as prospective employers. However, given the limited number of respondents, further research may be necessary before the the sex of business executives can be ignored altogether.

Despite the fact that few statistically significant outcomes were reported, the current study still contributes to the literature by examining the views business executives hold about individuals with ASD. As noted previously, these results can be used by employment programs to support individuals with ASD in the job search/interview process. For example, employment programs (e.g., Vocational Rehabilitation programs) should teach individuals with ASD about the need to emphasize strengths regarding qualities that may be a personal strength but may be viewed as weak based on business executives pre-conceived notions about the disorder. In fact, when skills are strong enough in the areas of verbal and non-verbal communication and social skills, the decision to self-disclose may also need to be considered. That is, not all individuals with ASD will want to disclose their diagnosis if it is not likely to be very apparent during the interview. There are pros and cons to disclosing if an individual decides to divulge their disability to employers. Some individuals prefer that others not know about their disability and do whatever they can to hide it out of fear that they could lose their job. Others will disclose in order to keep an honest working relationship and be able to ask for support from an employer who may have a better understanding of ASD (Hurlbutt & Chalmers, 2004). It may also be that individuals with ASD need direct instruction on what to say and to whom they should reveal

information when they choose to disclose their disability (Dew & Alan, 2007). Teaching the skill of disclosure as well as the inclusion of accommodations that help the individual with ASD to be successful is important for the employee with ASD (Whetzel, 2014). The education of self-disclosure could be completed by teachers, job coaches, Vocational Rehabilitation counselors, and/or employment specialists (Lee & Carter, 2012; Tilson & Simonsen, 2013). Teaching through scripting, role playing and/or mock interviews will give the individual with ASD the practice they may need to determine if it would be in their best interest to disclose their disability (Muthumbi, 2008; Lee & Carter, 2012). Having a good plan with support from employment specialists or job coaches that focuses specifically on the needs of the individual with ASD will help them to be better prepared for disclosure (Briel & Getzel, 2014; Wilczynski et al., 2013). Those who choose to self-disclose may not have as much to worry about as once thought because so many business executives reported favorable views about individuals with ASD.

If an individual with ASD chooses to disclose their disability to their employer, the employer will need a plan of action. This research has shown that business executives in the hiring role know more about autism spectrum disorder than they once did, which will benefit all involved. Having employees with a disclosure decision will require employers to be trained specifically in the areas of strength of the employee with ASD (Wilczynski et al., 2013). The personal characteristics of the individual with ASD could be used by the employer so they can build on these strengths. Not only should the employer build on the strengths of the individual, but they should work hand in hand with educators, job coaches, employment specialists, and/or Vocational Rehabilitation counselors to assist the individual with ASD in being successful on the job. Disclosure by the individual may be helpful for them, but when employers learn of the advantages in hiring an individual with ASD they could see that these individuals have a lot to

offer (being on time, attention to detail, like repetitive work) and they may be better employees (Briel & Getzel, 2014; Hurlbutt & Chalmers, 2004). Supervisors or employers who know in advance what their employees with ASD need (as far as accommodations) in order to be successful workers (e.g. having requirements stated directly, give time to adjust and adapt to new routines, and communicate effectively – both verbally and nonverbally) could benefit the employer and the employee alike (Wilczynski et al., 2013). Knowing more about ASD and the characteristics will help employers in understanding how to ensure success for their employee with ASD. Employers need to take steps to ensure their employees have a feeling of value causing the employee with ASD to feel secure in their commitment to the organization (Scott, Falkmer, Girdler, & Falkmer, 2015*).* Ensuring that employees have a feeling of value can be done through learning how to state expectations so that the employee understands fully what they need to do. Employers will need to work with job coaches and/or Vocational Rehabilitation counselors to know how to make their expectations known and understood by their employees with ASD (Chappel & Somers, 2010; Luecking, 2008; McDonough & Revell, 2010; Schaller & Yang, 2005). They will also need to be very specific with what they expect as far as the requirements for their job, the amount of time it should take to complete the job, and where to find the needed supports to get the job done (Scott et al., 2015). Each of these steps can help to ensure individuals with ASD are more successful because of the support given to them by the employer; which is really communication between the employer and employee (Scott et al., 2015). Employers also need to know and understand the American's with Disabilities Act (ADA) in order to provide reasonable work accommodations, when needed, to assist in the success of the employee with ASD (Lee & Carter, 2012; Whetzel, 2014).

References

Alberto, P. A., & Troutman, A. C. (2009). *Applied behavior analysis for teachers* (8th ed.). Upper Saddle River, New Jersey: Pearson.

Allen, K. D., Wallace, D. P., Renes, D., Bowen, S. L., & Burke, R. V. (2010, August 1). Use of video modeling to teach vocational skills to adolescents and young adults with autism. *Education and Treatment of Children*, *33 (3*), 339-349.

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Association.

Barrick, M. R., Swider, B. W., & Stewart, G. L. (2010). Initial evaluations in the interview: Relationships with subsequent interviewer evaluations and employment offers. *Journal of Applied Psychology*, *95 (6),* 1163-1172.

Bartram, D. (2004). Assessment in Organisations. *Applied Psychology*, *53 (2),* 237-259.

Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: predictive factors and student perspectives. *Exceptional Children*, *66 (4*), 509-529.

Berry, H. G. (2000, Fall). The Supplemental Security Income program and employment for young adults with disabilities: An analysis of the National Health Interview Survey on disability. *Focus on Autism ASD and Other Developmental Disabilities*, *15 (3*), 176-181.

Bidwell, A. (2014, April 18). Positive signals for new grads. *US News Digital Weekly*, *6(16),* 6-6. Retrieved from http://proxy.bsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=95649671&site=ehost-live&scope=site

Briel, L. W., & Getzel, E. E. (2014). In their own words: The career planning experiences of college students with ASD. *Journal of Vocational Rehabilitation, 40,* 195-202.

Brooke, V. A., Revell, G., & Wehman, P. (2009, March/April). Quality indicators for competitive employment outcomes: What special education teachers need to know in transition planning. *Teaching Exceptional Children*, 58-66.

Brown, L., Shiraga, B., & Kessler, K. (2006). The quest for ordinary lives: The integrated post-school vocational functioning of 50 workers with significant disabilities. *Research and Practice for Persons with Severe Disabilities, 30 (2),* 93-121.

Burke, R. V., Andersen, M. N., Bowen, S. L., Howard, M. R., & Allen, K. D. (2010). Evaluation of two instruction methods to increase employment options for young adults with autism. *Research in Developmental Disabilities, 31,* 1223-1233.

Buron, K. D., & Wolfberg, P. (Eds.). (2008). *Learners on the autism spectrum: Preparing highly qualified educators*. Shawnee Mission, Kansas: Autism Asperger Publishing.

Butterworth, J., Winsor, J., Smith, F. A., Migliore, A., Domin, D., Timmons, J. C., & Hall, A. C. (Winter 2014). *State data: The national report on employment services and outcomes* [National Report]. Boston, MA: University of Massachusetts Boston, Institute for Community Inclusion.

Cameto, R., Marder, C., Wagner, M., & Cardoso, D. (2003). *Youth employment* [Data brief]. Retrieved from National Longitudinal Transition Study 2 Website: http://www.ncset.org/publications/viewdesc.asp?id=1310

Carnahan, C. R., Hume, K., Clarke, L., & Borders, C. (2009, March/April). Using structured work systems to promote independence and engagement for students with autism. *Teaching Exceptional Children, 41 (4*), 6-14.

Carter, E. W., Austin, D., & Trainor, A. A. (2011, August). Factors associated with the early work experiences of adolescents with severe disabilities. *Intellectual and Developmental Disabilities, 49 (4*), 233-247.

Carter, E. W., Trainor, A. A., Ditchman, N., Swedeen, B., & Owens, L. (2009). Evaluation of a multicomponent intervention package to increase summer work experiences for transition-age youth with severe disabilities. *Research and Practice for Persons with Severe Disabilities, 34 (*2), 1-12.

Cederlund, M., Hagberg, B., Billstedt, E., Gillberg, I. C., & Gillberg, C. (2008). Asperger syndrome and autism: A comparative longitudinal follow-up study 5 years after original diagnosis. *Journal of Autism and Developmental Disorders, 38,* 72-85.

Center for Disease Control and Prevention. (2014). *Prevalence of autism spectrum disorders among children aged 8 years: Autism and developmental disabilities monitoring network, 11 sites, United States 2010.* Atlanta, GA: Author.

Chamorro-Premuzic, T., & Steinmetz, C. (2013, August). The perfect hire. *Scientific American Mind, 24 (3),* 42-47.

Chappel, S. L., & Somers, B. C. (2010). Employing persons with autism spectrum disorders: A collaborative effort. *Journal of Vocational Rehabilitation, 32,* 117-124.

Charles, S., & Waterworth, R. (2011). The importance of ability and effort in recruiters' and hirability decisions: An empirical examination of attribution theory. *Australian Psychologist, 47,* 232-237.

Cimera, R. E. (2008). The cost-trends of supported employment versus sheltered employment. *Journal of Vocational Rehabilitation, 28,* 15-20.

Cimera, R. E., & Cowan, R. J. (2009). The costs of services and employment outcomes achieved by adults with autism in the U.S. *Autism: The international journal of research and practice, 13(3),* 285-302.

Citron, T., Brooks-Lane, N., Crandell, D., Brady, K., Cooper, M., & Revell, G. (2008). A revolution in the employment process of individuals with disabilities: Customized employment as the catalyst for system change. *Journal of Vocational Rehabilitation, 28,* 169-179.

Corbett, R. J. (1973). Predicting employability of AFDC mothers. *Dissertations Abstracts International*: *Section A. Humanities and Social Sciences*, *33*(12-AO), 7024-7025.

Crudden, A., Sansing, W., & Butler, S. (2005, June). Overcoming barriers to employment: Strategies of rehabilitation providers. *Journal of Visual Impairment and Blindness*, 325-335.

Devaro, J. (2005, April). Employer recruitment strategies and the labor market outcomes of new hires. *Economic Inquiry, 43 (2),* 263-282.

Dew, D. W., & Alan, G. M. (Eds.). (2007). *Rehabilitation of individuals with autism spectrum disorders* (Institute on Rehabilitation Issues Monograph No. 32). Washington, DC: Government Printing Office.

Dhar, R. L. (2012). Why do they bully? Bullying behavior and its implication the bullied. *Journal of Workplace Behavioral Health*, *27*, 79-99.

Einhorn, L. J. (1981, July). An inner view of the job interview: An investigation of successful communicative behaviors. *Communication Education*, *30,* 217-228.

Fabian, E. S., Ethridge, G., & Beveridge, S. (2009). Differences in perceptions of career barriers and supports for people with disabilities by demographic, background and case status factors. *Journal of Rehabilitation, 75 (1*), 41-49.

Fevre, R., Lewis, D., Robinson, A., & Jones, T. (2012). Insight into ill-treatment in the workplace: Patterns, causes and solutions. *Contemporary Readings in Law and Social Justice*, *4(2)*, 245-277.

Fraser, R., Ajzen, I., Johnson, K., Hebert, J., & Chan, F. (2011). Understanding employers' hiring intention in relation to qualified workers with disabilities. *Journal of Vocational Rehabilitation*, *35*, 1-11.

Galassi, J. P., & Galassi, M. D. (1978, December). Preparing individuals for job interviews: Suggestions from more than 60 years of research. *Personnel and Guidance Journal*, 188-192.

Garcia-Iriarte, E., Balcazar, F., & Taylor-Ritzler, T. (2007). Analysis of case manager's support of youth with disabilities transitioning from school to work. *Journal of Vocational Rehabilitation*, *26*, 129-140.

Garcia-Villamisar, D., & Hughes, C. (2007, February). Supported employment improves cognitive performance in adults with autism. *Journal of Intellectual Disability Research*, *51 (2*), 142-150.

Garcia-Villamisar, D., Wehman, P., & Navarro, M. D. (2002). Changes in the quality of autistic people's life that work in support and sheltered employment. A 5-year follow-up study. *Journal of Vocational Rehabilitation, 17*, 309-312.

Gilmore, D. S., Schuster, J. L., Timmons, J. C., & Butterworth, J. (2000, Fall). An analysis of trends for people with MR, Cerebral Palsy, and Epilepsy receiving services from state VR agencies: Ten years of progress. *Rehabilitation Counseling Bulletin*, *44 (1)*, 30-38.

Gilson, B. B. (2000, Spring). One-stop career centers: Will they be used by people with disabilities. *Focus on Autism and Other Developmental Disabilities*, *15 (1*), 30-36.

Hagner, D., Rogan, P., & Murphy, S. (1992, January/February/March). Facilitating natural supports in the workplace: Strategies for support consultants. *Journal of Rehabilitation*, 29-34.

Hakel, M. D., & Schuh, A. J. (1971). Job applicant attributes judged important across seven diverse occupations. *Personnel Psychology*, *24*, 45-52.

Hall, J. P., & Parker, K. (2010, March). Stuck in a loop: Individual and system barriers for job seekers with disabilities. *The Career Development Quarterly*, *58*, 246-256.

Hampton, N. A., & Sharp, S. (2014). Internal motivation to respond without prejudice as a mediator of gender-attitudes toward mental illness. *Journal of Rehabilitation*, *80 (3)*, 30-39.

Hart, D., Zimbrich, K., & Ghiloni, C. (2001). Interagency partnerships and funding: Individual supports for youth with significant disabilities as they move into postsecondary education and employment options. *Journal of Vocational Rehabilitation*, *16*, 145-154.

Hartnett, H. P., Stuart, H., Thurman, H., Loy, B., & Batiste, L. C. (2011). Employers' perceptions of the benefits of workplace accommodations: Reasons to hire, retain and promote people with disabilities. *Journal of Vocational Rehabilitation*, *34*, 17-23.

Hasazi, S. B., Furney, K. S., & DeStefano, L. (2000). Implementing the IDEA transition mandates. In D. R. Johnson, & E. J. Emanuel (Eds.), *Issues influencing the future of*

transition programs and services in the United States (pp. 21-30). Minneapolis, MN: University of Minnesota.

Hasnain, R., & Balcazar, F. (2009). Predicting community-versus facility-based employment for transition-aged youth with disabilities: The role of race, ethnicity, and support systems. *Journal of Vocational Rehabilitation, 31*, 175-188.

Hendricks, D. (2010). Employment and adults with autism spectrum disorders: Challenges and strategies for success. *Journal of Vocational Rehabilitation, 32*, 125-134.

Henn, J., & Henn, M. (2005). Defying the odds: You can't put a square peg in a round hole no matter how hard you try. *Journal of Vocational Rehabilitation, 22*, 129-130.

Hernandez, B., Cometa, M. J., Velcoff, J., Rosen, J., Schober, D., & Luna, R. D. (2007). Perspectives of people with disabilities on employment, vocational rehabilitation, and the Ticket to Work program. *Journal of Vocational Rehabilitation, 27*, 191-201.

Hernandez, B., Keys, C., & Balcazar, F. (2000, October/November/December). Employer attitudes toward workers with disabilities and their ADA employment rights: A literature review. *Journal of Rehabilitation, 66(4),* 4-16.

Hollandsworth, Jr., J. G., Kazelskis, R., Stevens, J., & Dressel, M. E. (1979). Relative contributions of verbal, articulative, and nonverbal communication to employment decisions in the job interview setting. *Personnel Psychology, 32*, 359-367.

Howlin, P., Goode, S., Hutton, J., & Rutter, M. (2004). Adult outcome for children with autism. *Journal of Child Psychology and Psychiatry, 45 (2*), 212-229.

Hurlbutt, K., & Chalmers, L. (2002). Adults with autism speak out: Perceptions of their life experiences. *Focus on Autism and Other Developmental Disabilities, 17 (2*), 103-111.

Hurlbutt, K., & Chalmers, L. (2004, Winter). Employment and adults with Asperger syndrome. *Focus on Autism and Other Developmental Disabilities, 19 (4*), 215-222.

Hurlbutt, K., & Chalmers, L. (2004, Winter). Employment and adults with Asperger syndrome. *Focus on Autism and Other Developmental Disabilities*, *19 (4*), 215-222.

Jones, G. E., & Stone, D. L. (1995). Perceived discomfort associated with working with persons with varying disabilities. *Perceptual and Motor Skills, 81,* 911-919.

Ju, S., Roberts, E., & Zhang, D. (2013). Employer attitudes toward workers with disabilities: A review of research in the past decade. *Journal of Vocational Rehabilitation*, *38,* 113-123.

Jung, Y., Schaller, J., & Bellini, J. (2010, March 26). Predictors of employment outcomes for state-federal vocational rehabilitation consumers with HIV/AIDS. *Rehabilitation Counseling Bulletin*, *53 (3*), 175-185. http://dx.doi.org/10.1177/0034355209356596

Keel, J. H., Mesibov, G. B., & Woods, A. V. (1997). TEACCH - supported employment program. *Journal of Autism and Developmental Disorders*, *27 (1)*, 3-9.

Kiernan, W. E., Schalock, R. L., Butterworth, J., & Sailor, W. (1993). *Enhancing the use of natural supports for people with severe disabilities*. Boston, MA: Training and Research Institute for People with Disabilities.

Kittleson, M. J., & Brown, S. L. (2005). E-mail versus web survey response rates among health education professionals. *American Journal of Health Studies, 20 (1),* 7 - 14.

Krajewski, J., & Flaherty, T. (2000, April). Attitudes of high school students toward individuals with mental retardation. *Mental Retardation*, *38 (2),* 154-162.

Kregel, J. (1999). Why it pays to hire workers with developmental disabilities. *Focus on Autism and Other Developmental Disabilities, 14 (3),* 130-132.

Lattimore, L. P., Parsons, M. B., & Reid, D. H. (2002). A prework assessment of task preferences among adults with autism beginning a supported job. *Journal of Applied Behavior Analysis, 35,* 85-88.

Lattimore, L. P., Parsons, M. B., & Reid, D. H. (2006). Enhancing job-site training of supported workers with autism: A reemphasis on simulation. *Journal of Applied Behavior Analysis, 39,* 91-102.

Lawer, L., Brusilovskiy, E., Salzer, M. S., & Mandell, D. S. (2009). Use of vocational rehabilitative services among adults with autism. *Journal of Autism and Developmental Disorders, 39,* 487-494.

Laws, G., & Kelly, E. (2005, June). The attitudes and friendship intentions of children in United Kingdom mainstream schools towards peers with physical or intellectual disabilities. *International Journal of Disability, Development and Education, 52 (2*), 79-99.

Leasher, M. K., Miller, C. E., & Gooden, M. P. (2009). Rater effects and attitudinal barriers affecting people with disabilities in personnel selection. *Journal of Applied Social Psychology, 39 (9),* 2236-2274.

Lee, G. K., & Carter, E. W. (2012). Preparing transition-age students with high-functioning autism spectrum disorders for meaningful work. *Psychology in the Schools, 49 (10),* 988-1000.

Lindstrom, L., Doren, B., & Miesch, J. (2011). Waging a living: Career development and long-term employment outcomes for young adults with disabilities. *Exceptional Children, 77 (4),* 423-434.

Lopina, E. C., Rogelberg, S. G., & Howell, B. (2012). Turnover in dirty work occupations: A focus on pre-entry individual characteristics. *Journal of Occupational and Organizatinal Psychology*, *85*, 396-406.

Lovell, B. L., & Lee, R. T. (2011, April 14). Impact of workplace bullying on emotional and physical well-being: A longitudinal collective case study. *Journal of Aggression, Maltreatment & Trauma*, *20*, 344-357.

Luecking, R. G. (2008). Emerging employer views of people with disabilities and the future of job development. *Journal of Vocational Rehabilitation*, *29*, 3-13.

Luecking, R. G., & Wittenburg, D. (2009). Providing supports to youth with disabilities transitioning to adulthood: Case description from the Youth Transition Demonstration. *Journal of Vocational Rehabilitation*, *30*, 241-251.

Martins, P. S. (2011, April). Paying more to hire the best? Foreign firms, wages, and worker mobility. *Economic Inquiry*, *49(2)*, 349-363.

Matejkovic, J. E., & Matejkovic, M. E. (2006). Whom to hire: Rempant misrepresentations of credentials mandate the prudent employer make informed hiring decisions. *Creighton Law Review*, *39*, 827-847.

McCabe, H., & Wu, S. (2009). Helping each other, helping ourselves: A case of employment for an adult with autism in Nanjing, China. *Journal of Vocational Rehabilitation*, *30*, 57-66.

McDonough, J. T., & Revell, G. (2010). Accessing employment supports in the adult system for transitioning youth with ASD. *Journal of Vocational Rehabilitation*, *32*, 89-100.

McShane, T. D. (1993). Effects of nonverbal cues and verbal first impressions in unstructured and situational interview settings. *Applied Human Resource Management Research*, *4 (2)*, 137-150.

Migliore, A., & Butterworth, J. (2008, October). Trends in outcomes of the vocational rehabilitation program for adults with developmental disabilities: 1995-2005. *Rehabilitation Counseling Bulletin, 52 (1),* 35-44.

Miller, C. D., & Oetting, G. (1977). Barriers to employment and the disadvantaged. *Personnel and Guidance Journal*, 89-93.

Muthumbi, J. W. (2008). Enhancing transition outcomes for youth with disabilities: The partnerships for youth initiative. *Journal of Vocational Rehabilitation, 29,* 93-103.

Müller, E., Shuler, A., Burton, B. A., & Yates, G. B. (2003). Meeting the vocational support needs of individuals with Asperger Syndrome and other autism spectrum disabilities. *Journal of Vocational Rehabilitation, 18,* 163-175.

National Institute on Disability and Rehabilitation Research. (2012). *2012 Annual disability statistics compendium* [Annual report]. Durham, NH: Institute on Disability. University of New Hampshire.

National Institute on Disability and Rehabilitation Research. (2015). *Spotlight on Statistics*. Retrieved from Bureau of Labor Statistics: http://www.bls.gov/spotlight/2015/fifty-years-of-looking-at-changes-in-peoples-lives/home.htm

O'Day, B. (1999, Winter). Policy barriers for people with disabilities who want to work. *American Rehabilitation,* 8-15.

Parent, W., Unger, D., Gibson, K., & Clements, C. (1994, Autumn). The role of the job coach: Orchestrating community and workplace supports. *American Rehabilitation, 20 (3)*. Retrieved from <A href="http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=9501137617&si

te=ehost-live">The role of the job coach: Orchestrating community workplace supports.</A>

Patterson, A., & Rafferty, A. (2001, November). Making it to work: Towards employment for the young adult with autism. *International Journal of Language and Communication Disorders, 36,* 475-480.

Pelios, L. V., MacDuff, G. S., & Axelrod, S. (2003, February). The effects of a treatment package in establishing independent academic work skills in children with autism. *Education and Treatment of Children, 26 (1)*(1), 1-22.

Petty, D. M., & Fussell, E. M. (1997, Spring). Employer attitudes and satisfaction with supported employment. *Focus on Autism and Other Developmental Disabilities, 12 (1),* 15-22.

Piotrowski, C., & Armstrong, T. (2006). Current recruitment and selection practices: A national survey of fortune 1000 firms. *North American Journal of Psychology, 8 (3),* 489-496.

Pit, S. W., Vo, T., & Pyakurel, S. (2014). The effectiveness of recruitment strategies on general practitioner's survey response rates - a systematic review. *Medical Research Methodology, 14 (76).*

Popovich, P. M., Scherbaum, C. A., Scherbaum, K. L., & Polinko, N. (2003). The assessment of attitudes toward individuals with disabilities in the workplace. *The Journal of Psychology, 137(2),* 163-177.

Porter, S. R., & Umbach, P. D. (2006, March). Student survey response rates across institutions: Why do they vary? *Research in Higher Education, 47 (2),* 229-247.

Price, L. A., Gerber, P. J., & Mulligan, R. (2007, November/December). Adults with Learning Disabilities and the Underutilization of the Americans with Disabilities Act. *Remedial and Special Education, 28 (6),* 340-344.

Rao, P. A., Beidel, D. C., & Murray, M. J. (2008). Social skills interventions for children with Asperger's syndrome or high-functioning autism: A review and recommendations. *Journal of Autism and Developmental Disorders, 38,* 353-361.

Rodman, K., Biloslavo, R., & Bratoz, S. (2013). Institutional quality of a higher education institution from the perspective of employers. *Minerva: A Review of Science, Learning and Policy, 51,* 71-92.

Rogers, C., Lavin, D., Tran, T., Gantenbein, T., & Sharpe, M. (2008). Customized employment: Changing what it means to be qualified in the workforce for transition-aged youth and young adults. *Journal of Vocational Rehabilitation, 28,* 191-207.

Romoser, M. (2000, Winter). Malemployment in autism. *Focus on Autism and Other Developmental Disabilities, 15 (4*), 246-247.

Rosenheck, R., Leslie, D., Keefe, R., McEvoy, J., Swartz, M., Perkins, D., ... CATIE Study Investigators Group (2006). Barriers to employment for people with schizophrenia. *American Journal of Psychiatry, 163,* 411-417. http://dx.doi.org/Retrieved from

Rutkowski, S., Daston, M., VanKuiken, D., & Riehle, E. (2006). Project SEARCH: A demand-side model of high school transition. *Journal of Vocational Rehabilitation, 25,* 85-96.

Saunders, L. (2012, July). Identifying core reference competencies from an employers' perspective: Implications for instruction. *College and Research Libraries, 73 (4)*(), 390-404.

Schaller, J., & Yang, N. K. (2005). Competitive employment for people with autism: Correlates of successful closure in competitive and supported employment. *Pro-Ed Rehabilitation Counseling Bulletin, 49 (1*), 4-16.

Scott, M., Falkmer, M., Girdler, S., & Falkmer, T. (2015, October 13). Viewpoints on factors for successful employment for adults with autism spectrum disorder. *Plos One*, 1-15.

Shadish, W., Cook, T., & Campbell, D. (2002). *Experimental and quasiexperimental designs for generalized causal influence*. Boston, MA: Houghton Mifflin.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Quasi-experimental designs that either lack a control group or lack pretest observations on the outcome. In *Experimental and quasi-experimental designs for generalized causal inference* (pp. 103-134). Boston, MA: Houghton-Mifflin.

Shandra, C. L., & Hogan, D. P. (2008). School-to-work program participation and post-high school employment of young adults with disabilities. *Journal of Vocational Rehabilitation, 29*, 117-130.

Smith, K., Webber, L., Graffam, J., & Wilson, C. (2004). Employer satisfaction with employees with a disability: Comparisons with other employees. *Journal of Vocational Rehabilitation, 21*, 61-69.

Social Security Act, 42 U.S.C.A. § 301 *et seq.* (1935).

Social Security: The Official Website of the Social Security Administration. (February 2013). http://www.ssa.gov/policy/docs/statcomps/ssi_monthly/index.html

Spagnolo, A. B., Dolce, J. N., Roberts, M. M., Murphy, A. A., Gill, K. J., Libera, L. A., & Lu, W. (2011). A study of the perceived barriers to the implementation of circles of support. *Psychiatric Rehabilitation Journal, 34 (3*), 233-242.

Strub, M. R., & Stewart, L. (2010). Case study: Shelving and the autistic employee. *Journal of Access Services, 7*, 262-268.

Sykes, R. (2007). Disabled face multiple barriers to employment. *Policy and Practice*, 10-13.

Taylor, B. J., McGilloway, S., & Donnelly, M. (2004). Preparing young adults with disability for employment. *Health and Social Care in the Community, 12 (2),* 93-101.

Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities. *Career Development for Exceptional* Individuals, 32, 160-181.

Thomas, A., Vaughn, D., & Doyle, A. (2007). Implementation of a computer based implicit association test as a measure of attitudes toward individuals with disabilities. *Journal of Rehabilitation, 73 (2),* 3-14.

Thornton, C., & Sears, J. (1991). *Characteristics of adults with developmental disabilities: Evidence from the Survey of Income and Program Participation*.

Tilson, G., & Simonsen, M. (2013). The personnel factor: Exploring the personal attributes of highly successful employment specialists who work with transition-age youth. *Journal of Vocational Rehabilitation, 38,* 125-137.

Unger, D. (2007). Addressing employer personnel needs and improving employment training, job placement and retention for individuals with disabilities through public-private partnerships. *Journal of Vocational Rehabilitation, 26,* 39-48.

Unger, D. D. (1999, Fall). Workplace supports: A view from employers who have hired supported employees. *Focus on Autism and Other Developmental Disabilities, 14 (3),* 167-179.

Unger, D. D., Parent, W., Gibson, K., Kane-Johnston, K., & Kregel, J. (1998, Spring). An analysis of the activities of employment specialists in a natural support approach to supported employment. *Focus on Autism and Other Developmental Disabilities, 13 (1*), 27-38.

United States Bureau of Labor and Statistics. (2011). *BLS spotlight on statistics: The recession of 2007-2009* [Annual report]. Retrieved from http://www.bls.gov/spotlight/2012/recession/pdf/recession_bls_spotlight.pdf

United States Department of Labor. (1968). *Manpower report of the President, including a report on manpower requirements, resources, utilization, and training*. Washington, DC: Government Printing Office.

Vilchinsky, N., Werner, S., & Findler, L. (2010). Gender and attitudes toward people using wheelchairs: A multidimensional perspective. *Rehabilitation Counseling Bulletin*, *53*, 163-174.

Volkmar, F. R., Paul, R., Klin, A., & Cohen, D. (2005). *Handbook of autism and pervasive developmental disorders* (Vols. 1-2). Hoboken, NJ: John Wiley & Sons.

Volkmar, F. R., Paul, R., Klin, A., & Cohen, D. (Eds.). (2005). *Handbook of Autism and pervasive developmental disorders: Diagnosis, development, neurobiology, and behavior* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Wehman, P., Gibson, K., Brooke, V., & Unger, D. (1998). Transition from school to competitive employment: Illustrations of competence for two young women with severe mental retardation. *Focus on Autism and Other Developmental Disabilities, 13 (3),* 130-143.

Wehman, P., West, M., & Kane-Johnston, K. (1997). Improving access to competitive employment for persons with disabilities as a means of reducing social security expenditures. *Focus on Autism and Other Developmental Disabilities, 12 (1),* 25-30.

Werner, P., & Davidson, M. (2004). Emotional reactions of lay persons to someone with Alzheimer's disease. *International Journal of Geriatric Psychiatry*, *19*, 391-397.

West, M. D., Kregel, J., Hernandez, A., & Hock, T. (1997, Fall). Everybody's doing it: A national study of the use of natural supports in supported employment. *Focus on Autism and Other Developmental Disabilities, 12 (3),* 175-181.

Whetzel, M. (2014). Interviewing tips for applicants with autism spectrum disorder (ASD). *Journal of Vocational Rehabilitation, 40,* 155-159.

Wilczynski, S. M., Trammell, B., & Clarke, L. S. (2013). Improving employment outcomes among adolescents and adults on the autism spectrum. *Psychology in the Schools, 50 (9),* 876-887.

Willis, T. H., & Taylor, A. J. (1999). Total quality management and higher education: The employers' perspective. *Total Quality Management, 10(7),* 997-1007.

Woods, J. J., & Wetherby, A. M. (2003). Early identification of and intervention for infants and toddlers who are at risk for Autism Spectrum Disorders. *Language, Speech and Hearing Services in Schools, 34,* 180-193.

Young, D. M., Beier, E. G., & Beier, S. (1979, March). Beyond words: Influence of nonverbal behavior of female job applicants in the employment interview. *Personnel and Guidance Journal,* 346-350.

Zimple, L. (Ed.). (1971). *The disadvantaged worker: Reading in developing minority manpower*. Reading, MA: Addison-Wesley.

Appendix A

RECRUITMENT EMAIL TO OPEN CORRESPONDENCE WITH ROTARY CLUBS

Hello,

I am a graduate student from Ball State University writing my dissertation on Competitive Employment and Autism Spectrum Disorders (ASD). I want to understand business leaders' perspectives about individuals with ASD and how this may influence competitive employment. By understanding what employers seek in an employee during the hiring process as well as their views about ASD, program training individuals with ASD can be appropriately designed to increase the likelihood competitive employment will increase for this population.

I am recruiting business leaders for my research project, which involves completing a 13-question survey taking no more than 5 minutes. I have set up the survey so that all responses are confidential (even I will not know who provided which response). I hope to work with Rotary Clubs because of your motto of "Service above Self" because that suggests you might have an interest in learning more about the workplace and people with disabilities. **I hope your club will join me in this effort by agreeing to participate in this brief survey.** Please pass along to your membership.

https://bsu.qualtrics.com/SE/?SID=SV_bw8MYYKkFXwhV4h

I will be sending a total of 3 emails to you for the purpose of recruiting your membership to complete the survey and as reminders to complete it. Please contact me (Wanietta Stuckey) or the chair of my dissertation committee (Dr. Susan Wilczynski) if you have any questions. Our email addresses are below. I look forward to hearing from you regarding your club's decision to participate.

Respectfully,

Wanietta C. Stuckey M.Ed.
Ball State University graduate student
wcstuckey@bsu.edu

Susan M. Wilczynski, PhD, BCBA-D
Ball State University Distinguished Professor of Special Education and ABA
Email: smwilczynski@bsu.edu

EMAIL #1

From: Wanietta C. Stuckey
Sent: _____
To: <database>
Subject: Survey regarding Competitive Employment for Individuals with Autism Spectrum Disorders (ASD)

I am writing to ask for your participation in a survey that I am conducting regarding Accessing and Gaining Competitive Employment. Often times these individuals have the exact skills needed, but are unable to access employment. I am contacting individuals such as yourself as well as other Rotary Club members to gain insightful information regarding important characteristics that are evident for prospective employees. Because you are a Rotary member and your motto is "Service above self" I know that your input on these survey questions will help individuals gain competitive employment.

Your response to this survey is very important and will help in understanding important characteristics that are evident to gaining competitive employment. As you participate in this survey, you will be providing information that will assist in understanding what characteristics are important for individuals.

This short survey will take no longer than ten minutes to complete. Please click the link below to go directly to the survey website or copy and paste the address into your web browser.

https://bsu.qualtrics.com/SE/?SID=SV_6sV4LTUjLHBGZhP&Preview=Survey&BrandID=bsu

Your participation in this survey is entirely voluntary and all of your responses will be kept confidential. There is no personally identifiable information associated with your responses in any reports of this data. Should you have any further questions or comments, please feel free to contact me at wcstuckey@bsu.edu.

I appreciate your time and consideration in completing this survey. Thank you for participating. It is only through the help of individuals like yourself that we can provide information to help individuals become competitively employed.

Respectfully,

Wanietta C. Stuckey

EMAIL #2

From: Wanietta C. Stuckey
Sent: _____
To: <database>
Subject: Survey regarding Competitive Employment for Individuals with Autism Spectrum Disorders (ASD)

I recently sent you an email requesting you complete a brief survey about competitive employment for individuals.

This survey should take no longer than ten minutes to complete. If you have already completed the survey, thank you your participation is appreciated. If you have not yet completed the survey, I would like to encourage you to take just a few minutes of your time to complete it.

Below is a link that will take you directly to the survey. If the link does not work you can copy and paste the link into your Internet browser.

https://bsu.qualtrics.com/SE/?SID=SV_6sV4LTUjLHBGZhP&Preview=Survey&BrandID=bsu

Thank you for participating in this survey. Your input is very important. The information acquired through this survey will help individuals in becoming competitively employed.

Respectfully,

Wanietta C. Stuckey

EMAIL #3

From: Wanietta C. Stuckey
Sent: _____
To: <database>
Subject: Survey regarding Competitive Employment for Individuals with Autism Spectrum Disorders (ASD)

I understand how busy this time of year is and how valuable your time is. I am hoping that you might be able to give ten minutes of your time within the next few days to complete the survey regarding competitive employment.

If you have already completed the survey, thank you for your time and input. If you have yet to respond, I would like to urge you to complete the survey. The survey data exchange will be ending next Friday, so I am emailing everyone who has not yet had the opportunity to participate in the survey.

The following link will take you directly to the survey web site. If the link does not work you can copy and paste the link into your Internet browser.

https://bsu.qualtrics.com/SE/?SID=SV_6sV4LTUjLHBGZhP&Preview=Survey&BrandID=bsu

I would like to thank you again for agreeing to participate in this survey. The information that you have to offer is very important and will help with individuals gaining competitive employment.

Respectfully,

Wanietta C. Stuckey

															Appendix BClub Name
															Meeting Place
															Website
															Contact Person
															Email Address
															City Population
															Contact Date
															Time of Contact
															Response Date
															Yes/No
															2nd Attempt
															Time
															3rd Attempt
															Time

Copies of emails received

- Dear Ms. Stuckey: Your request to have our club participate in your survey will be brought before the club's board of directors at its next meeting on February 17, 2015. Our club has 225 members and each is free to choose their own level of participation in club activities and events. If the board agrees, we will inform the membership about your survey and its purpose at one of the subsequent club meetings, and also include your contact information in our weekly bulletin. We cannot compel anyone to participate and we will not distribute our mailing list to you. If a member wishes to participate, they will contact you.
- Ms. Stuckey, At the last meeting of the board of directors (March 17th), the board decided to decline participation in your research project.
- Hi Wanietta, Thanks for reaching out to our club regarding your dissertation. To be honest I doubt there would be much interest from our club members on this topic. Best of luck in your efforts.
- Wanietta, I completed the survey when you first sent it to me. Our policies do not allow us to share it with members of the club.
- FYI - I will point out that I assume you are a millennial, and as such you realize sending out a 10 minute survey is not ideal. 10 minutes is a long time for a professional to spend on something that provides them no personal benefit. Sorry but this survey would not apply for us.
- Good afternoon Wanietta: Thank you for your email. In a sense you are correct, we are very interested in situations and individuals with disabilities of all kinds. In fact we are involved one as I write to you, however, we do not allow any solicitations of our members for any reason, at any time. Having said that we would be very interested in you making a presentation on your thesis at one of our regular weekly meetings. If any of the members decide they would like to actively participate in your project they can discuss it with you after the meeting. This, however is probably not going to happen if you are in Indiana and we are in Massachusetts. If you ARE in Massachusetts we will be happy to work out the details of you making a presentation to us.
- I offered your request to the club but got no takers. Sorry,
- I will see what I can do. I do know that the Walgreens corporation has a policy of hiring people with disabilities in positions that can be adapted to the disability. One of our members manages a Walgreens store. You might want to find some Walgreens executives to interview. They especially hire persons with disabilities in their distribution centers. Also our school district (Kansas USD 383) has a person who is a specialist in finding employment for persons with disabilities. Other school districts of similar size might have such a person, and that person might be a good resource for you also. Ball State is lovely. I chaired the last visit by the Higher Learning Commission for BSU's regional accreditation.
- Warietta: We have discussed this as a group and feel this is not something we can be useful in helping with at this time. Thanks for contacting us.
- Our Rotary Club President, _____, forwarded your email to me and asked me to review your request to survey our membership. Out of curiosity, I completed the survey.

It was simple for me to do because I work with SED youth and am familiar with ASD. However, it may be more of a challenge for other business owners to complete.That said, I note with interest that you are addressing your query to Rotarians. Is there a particular reason you are targeting Rotarians? Is your premise that service club members might be more willing to accommodate individuals with ASD? Although our Club is fairly large (150+), a large number of our members are retired or their business is a sole proprietorship. Consequently, if our President elects to encourage participation by our Membership, I would recommend limiting distribution to actively employed individuals with hiring authority, or to clarifying that such individuals are the intended participants in the survey.

- Wanietta, You recently sent me an email requesting that I invite the members of the Mission Viejo Rotary Club to participate in your graduate study on ASD. I brought this request to my Board of Directors at our Sept. 10 meeting and gained their approval. Therefore, you may send me any outreach materials, questionnaires, etc. which I will forward to our members as I receive them. Please use this email address.
- Please remove us from your email list.
- Hi Wanda- I'd be delighted to pass this on to our club members. It sounds like such an important area of research, and I wish you the best of luck with your project. I hope when you've completed your dissertation, you might consider coming to our club to share what you've found.
- Dear Wanietta, Thank you for contacting me. I have forwarded your e-mail to all the members of my Rotary Club. I will also participate in the survey. Best wishes for success in this endeavor.
- I will have a description of your project and a link to the survey published in our weekly communique to our members.
- Hello Wanietta, Thank you for including us in your research around ASD. I am passing this on to a member of our club that might be able to assist you with your worthy efforts.
- As most of our members are retired, I do not think this survey would be of much interest to our current members. Thank you for asking, and good luck with your study. Regards
- Wanietta, When I clicked on the link, I said no to the question about hiring (I think the first or second question) and it said the survey was complete. Was that right? I was excited to take it, since one of my club members said she took it and was enlightened about how much she did not know about autism.
- Your request has been passed around to all of our Board members. I can give you no guarantees of participation, but this has been distributed and is on the list to be identified at committee meetings throughout the balance of the month.
- Wanietta: I have sent this out to each member of my club twice now. I will send out one last request to implore their participation; hopefully some will respond. I am not in the faction of responders you are looking for, otherwise I would have already taken the survey.
- I will have a description of your project and a link to the survey published in our weekly communique to our members.
- Hello Rotarians: In light of our presentation at yesterday's meeting and our trip to the Special Olympics, I am hoping you will take the time to assist this graduate student with her dissertation. Thanks for your time and attention.

- Wanietta: I shared your request at our most recent club meeting. One of our members, a business owner who is slightly autistic and very involved with the local autism community was out of town this week. But I will forward your request to him. Additionally, as an employer myself I will be happy to participate in your survey. Please contact me with any additional comments or questions you may have.
- To: Wanietta Stuckey: Please be advised that I am not in a position to make decisions about hiring individuals at my organization. We are a small (7 employees) non-profit museum and only hire to replace when individuals leave. The youngest person here is over 40 years old and has been with the organization over 15 years. Would you please remove my name and e-mail address from your database and do not share with any other individual, department, institution, vendor, outside mailing list or corporation. Your cooperation is greatly appreciated.
- Survey has been completed. Just a word of advice…If you understand how busy I must be, then why contact me about a survey that I have already completed?

Appendix C

Copy of survey

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FOR SOCIAL SCIENCE RESEARCH

Study Title Competitive Employment and Autism Spectrum Disorder: Employer Perspectives

Study Purpose and Rationale
I want to understand business leaders' perspectives about individuals with ASD and how this may influence competitive employment. By understanding what employers seek in an employee during the hiring process as well as their views about ASD, programs training individuals with ASD can be appropriately designed to increase the likelihood competitive employment will increase for this population.

Inclusion/Exclusion Criteria
To be eligible to participate in this study, you must be between the ages of 18 and 100, a member of a Rotary Club, a business executive, and a person in the hiring role in your institution.

Participation Procedures and Duration
Participation in this survey will require you to answer questions about your familiarity with ASD as well as demographic questions. It will take approximately 10 minutes to complete the survey. Your participation in this study is completely voluntary and there are no foreseeable risks associated with it. However, if you feel uncomfortable answering any of these questions, you can withdraw from the survey at any point. Your responses are beneficial and may increase the likelihood that individuals with ASD will be able to obtain and retain competitive employment.

Data Confidentiality or Anonymity
I have set up the survey so that all responses are anonymous (I will not know who provided which response). Your survey responses will be coded and stored on-line. The data may be used in future research, but that research has not yet been defined.

Storage of Data
The data will be collected on-line and encrypted. The data will be kept for 5 years after which it will be deleted. Only members of the research team will have access to the data.

Risks or Discomforts
The only anticipated risk from participating in this study is that you may not feel comfortable answering some of the questions. You may choose not to answer any question that makes you uncomfortable and you may quit the study at any time.

Benefits
You may benefit from understanding what other Rotary Clubs members are doing to support individuals with ASD in the workplace.

Voluntary Participation
Your participation in this study is completely voluntary and you are free to withdraw your permission at anytime for any reason without penalty or prejudice from the investigator.

IRB Contact Information
For one's rights as a research subject, you may contact the following: For questions about your rights as a research subject, please contact the Director, Office of Research Integrity, Ball State University, Muncie, IN 47306, (765) 285-5070 or at irb@bsu.edu.

Study Title Competitive Employment and ASD: Employers Perspectives
I hope you will join me in this effort by agreeing to participate in this brief survey. Please contact me, Wanietta Stuckey (westuckey@bsu.edu) or the chair of my dissertation committee, Dr. Susan Wilczynski (smwilczynski@bsu.edu) if you have any questions.

Agree

Disagree

Do you participate in the interviewing process for hiring potential employees?

- Yes
- No

In which state does your organization reside?

Describe the population of your city/town where your organization resides:

- population greater than 50,000
- population at least 10,000 but less than 50,000
- population less than 10,000

What is your occupation? (Please choose one)

- Management/professional/and related
- Service
- Sales and office
- Agriculture
- Construction/extraction/maintenance
- Production/transportation/material moving
- Government
- Health care
- Other

How many people are employed in your organization?

- 1 - 25
- 26 - 75
- 76 - 100
- 101 - 499
- 500 +

What is the position you are most likely to hire for?

- Entry level
- Management

Please rate the importance of the following characteristics during the interview process.

	Crucial	Very Important	Important	Somewhat Important	Unimportant
Attire					
Body facing away from you (partly or in full)					
Body facing you					
Communication					
Education					
Eye contact					
Facial expression					
Gestures					
Head nodding					
Interaction					
Quick responses					
Self-confidence					

Please select how important the following qualities are in prospective employees.

	Crucial	Very Important	Important	Somewhat Important	Unimportant
Ability					
Attendance/punctual					
Attention to detail					
Communication skills					
Education					
Focus					
Honesty					
Independence					
Logical					
Social					

How familiar are you with autism spectrum disorder?

- Very Familiar: I know at least one characteristic of and can answer questions about autism spectrum disorder.
- Familiar: I can answer questions about autism spectrum disorder.
- Somewhat Familiar: I know at least one characteristic of autism spectrum disorder.
- Not Familiar: I have heard of autism spectrum disorder.
- Not at all Familiar: I have never heard of autism spectrum disorder.

Identify whether or not people with autism spectrum disorder have the following qualities.

	People with autism spectrum disorder exhibit these qualities	People with autism spectrum disorder do not exhibit these qualities
Ability		
Attendance/punctual		
Attention to detail		
Communicates clearly		
Education		
Eye Contact		
Focus		
Honesty		
Independent		
Logical		
Social		

Describe your connections with **individuals with disabilities**. (Check all that apply)

- I work directly with an individual with a disability.
- Someone with a disability works for my company, but I have limited contact with him/her.
- I do not currently work with anyone with a disability, but I have in the past.
- I have never worked with individuals with disabilities.
- I have a relative with a disability.
- A colleague or friend of mine has a child with a disability.
- One or more children in my neighborhood have a disability.
- I have no personal connection with individuals with disabilities.
- Other (please describe)

Describe your connections with individuals with **autism spectrum disorders**. (Check all that apply)

- I work directly with an individual with autism.
- Someone with autism works for my company, but I have limited contact with him/her.
- I do not currently work with anyone with autism, but I have in the past.
- I have never worked with individuals with autism spectrum disorders.
- I have a relative with autism.
- A colleague or friend of mine has a child with autism.
- One or more children in my neighborhood have autism.
- I have no personal connection with individuals with autism spectrum disorder.
- Other (please describe)

What is your gender?

- Male
- Female