CHARACTERISTICS OF SUCCESSFUL CLASSROOM BEHAVIOR
THERAPISTS OF INDIVIDUALS WITH AUTISM:
A QUALITATIVE CASE STUDY

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CHARACTERISTICS OF SUCCESSFUL CLASSROOM BEHAVIOR

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Dissertation

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ABSTRACT

With the increasing rate of individuals diagnosed with developmental disabilities, the educational demands for this population will continue to increase over time (Cox, 2001). The personnel selection process for intervention specialists require specialized attention since it is singularly dependent on certain personal characteristics of the educator (Sapir & Wilson, 2001). The purpose of this qualitative case study was to identify the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism, as they were viewed from the perspectives of effective novice and mentor CBTs.

One broad research question guided this study:

1. What are the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1a. What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1b. What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?
Three broad categories of characteristics emerged from the data analysis to include: (a) personal efficacy; (b) interactive skills; and (c) professional knowledge. Mentor and novice CBTs identified 8 significant characteristics of successful CBTs. For personal efficacy, mentor and novice CBTs identified the following: (a) problem solver, (b) passionate, (c) goal oriented and (d) organized. For interactive skills, mentor and novice CBTs identified the following: (a) team player and (b) accepts and provides feedback. For professional knowledge, mentor and novice CBTs identified the following characteristics as significant of successful CBTs: (a) prior experience with children affected with a disability and (b) ability to implement principles of applied behavior analysis.

The results indicated that both novice and mentor CBTs identified personal characteristics as significantly more important than professional characteristics. Moreover, the overwhelming majority of personal characteristics appeared in the category of personal efficacy. A major conclusion of this study, then, is an increased awareness that a range of personal qualities may ultimately be a better predictor of success as a CBT than the professional knowledge a potential candidate brings to the job. Implications for CBTs, CBT supervisors, school administrators, higher education staff, and future research are presented.
DEDICATION

In memory of my father, Andrew “Andy” Dimitriou

With gratitude to my mother, Mary Dimitriou

With love to my husband, Joseph Artiste

To all my wonderful family and friends

I love you all!
ACKNOWLEDGEMENTS

My dissertation research and experience as an educator confirmed what I always presumed. A teacher can make the difference in the life of a child. However, the difference a child can make on a teacher is everlasting.

Thank you to my dissertation committee Dr. Daviso, Dr. Foster, Dr. Queener, and Dr. Vakil for their help and support throughout this entire process, the Lerner School and all the wonderful individuals who took part and supported this study. I would also like to deeply thank my dissertation chair, Dr. Francis Broadway and my methodologist, Dr. Evangeline Newton, for all of their guidance throughout this process. I will be eternally grateful for the time, talent, and support that you both rendered on my behalf.

Throughout my education, I have been blessed with exceptional teachers who have challenged, inspired, and motivated me to learn to the best of my ability. However, my true teachers in life, the ones who have left lasting imprints in my heart and soul are “my students.” The students who I spent educating and advocating for during the past 13 years of my career. I cherish their strength, their hard work, and their will to never give up.

My parents believed in the importance of education. They were always there to guide me through my educational endeavors. My late father would have been so proud to call me Dr. Artiste; the daughter who should have stopped attending school after obtaining her master’s degree. However, secretly I knew he was so proud that I continued
on to obtain my doctorate. My gratitude and love to my amazing mother who never let me get discouraged or give up and always stated, “you can do this.” I would be remiss if I did not mention my brother and sister-in-law who both lead by example, do the right thing, and now, we can all be referred to as “Doctor.”

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CHAPTER I

INTRODUCTION

**Teacher Characteristics**

Teachers have multiple roles as educators and critical factors contributing to their jobs on a daily basis. Therefore, it is imperative to identify key characteristics, defining successful teacher candidates from individuals who may not be appropriate to work, specifically as the focus of this dissertation, with individuals with autism. When assessing educators, one of the most important factors to consider is defining the characteristics of a good teacher. However, if minimal criteria exist to define good teachers, it is difficult to measure this role accurately (Smith, 2005). Therefore, defining characteristics resembling good teachers is significant.

Individuals with special needs require particular attention regarding curriculum, challenging behavior, and individualization pertaining to how they process and comprehend information (de Hirsch, 1977). Rosen (1975) and Biber (1958) have identified several characteristics and qualities essential for educating individuals. These characteristics are organized into personal characteristics to include communicating and educating others, understanding of the self, and knowledge. Some educators enter the teaching field due to a personal connection, such as a family member affected with a developmental disability. Biber categorized personal capacities of educators into
sensitivity of individual’s feelings, readiness to listen and observing individuals to maximize communication, and humor. Biber’s interpretation of teachers’ personal characteristics and personal capacities overlap and provide an overall benefit to the individual with special needs.

The characteristics of a suitable teacher candidate can be broken down into three levels (Sapir & Wilson, 2001). At the base of Level One are qualities necessary for individuals to encompass prior to entering the field of special education. Teacher candidates at the base level deliver basic education with little intrinsic motivation to move through the second and third levels. At Level One, the expectation is the candidate will maintain himself or herself as a mediocre educator with little to no opportunity to enhance skill level. Potential reasons why individuals are at the base level could be a direct result of the following: inadequate training and preparation for the complexities of identifying individual needs and developing and implementing an Individual Education Plan (IEP) that is appropriate and agreed upon by the IEP team. (Gehrke & McCoy, 2007).

The second level of the pyramid model represents qualities of teacher candidates who have the ability to work vigorously to the next level as an educator. Among the most important qualities of candidates at this level are insight and empathy (Sapir & Wilson, 2001). At the second level, teacher candidates have an internal desire and motivation to help students. Nevertheless, they may struggle when expected to reduce challenging behavior or assist an individual with extremely complex learning needs, mainly because they are not equipped to do so. With proper training in complex areas and the willingness
to learn, the candidate at the middle level can rise from an appropriate candidate to a superior candidate (Sapir & Wilson, 2001).

The third level depicts the styles of behavior and temperament. These behaviors align with both the candidate and student to benefit their success in working with one another (Sapir & Wilson, 2001). Smith (2005) revealed that teacher candidates at the third level, also referred to as experts in professionalism and competence, ensuring that “the seeds for professionalism in teaching are planted and nourished in order to develop independently after graduation from pre-service teacher education” (p. 177). The third set of characteristics in the pyramid do not represent positive or negative characteristics, but rather identifies the appropriate candidates to work with an individual with special needs. For example, these candidates encompass a natural rapport with their students and carry a passion for helping others, regardless of their disability.

Toomer and Crowe (2004) noted that a hiring administrator has about an average of 20 minutes to depict a suitable candidate for a particular position. So, within a short amount of time, the administrator is required to check a candidate’s transcripts and resume, respond intellectually regarding the candidate’s preparation programs and field experiences, and identify key competencies to include behavior training, curriculum development, and professional rapport with families and staff. Beutel, Dugan, and Ebmeier (2010) identified that there is scant evidence to document the personnel selection process within the educational realm. Therefore, it is imperative that a specific employment interview tool is essential to assist hiring administrators in determining successful educators from the mediocre (Hynes, Sullivan, & Yeager, 2011).
Autism Spectrum Disorder

According to the U.S. Centers for Disease Control and Prevention (CDC, 2012), Autism Spectrum Disorder (autism) is a condition that consists of a diverse continuum of symptoms. It is defined as a developmental disability that causes substantial impairments in social interaction, communication, and the presence of unusual behaviors and interests. Autism characteristics can be identified before a child is three years old, and may require life-long services (Nwokeafor, 2009). Since the 1940s, the incidence of autism has exploded exponentially into the number of individuals affected. In fact, autism statistics from the CDC (2014) identified 1 in 68 American children and 1 in 42 boys were diagnosed with autism.

Autism varies in its symptoms, and in many instances may go undetected in mildly affected children, or it can be clouded by other debilitating disabilities (Croen, 2008). Autism involves diversified gene types affecting individuals on various levels, alluding to the possibility that different genes are associated with autism. Considering the probable causes of autism, it is likely that several factors combine to cause autism (National Institute of Health [NIH], 2008). For example, the potential that some children are genetically more susceptible to particular food allergies, or more likely to respond negatively to certain environmental pollutants, is high. However, until answers are concrete and supported by research, it is apparent that the current emphasis on autism is focused on empirically based treatment (Nwokeafor, 2009).

There are several causes of autism, but no known cure (Nwokeafor, 2009). In their ongoing research, Rudy (2008), Powers (2009), Croen (2008), and Just and
Minshew (2009) have depicted the possible causes of autism. They have reached an agreement that both genetics and environment are contributing factors to autism. According to Rudy, abnormal levels of serotonin or other neurotransmitters have been found in several regions of the brain in individuals with autism. Without a known cure, Lovaas (1987) argued that clinical and empirical research results have shown that early diagnosis coupled with intensive intervention campaigns can go a long way to improving the functioning skills of individuals with autism.

With increasing diagnostic rates, identifying the educational path for individuals affected with autism is becoming increasingly complex and expensive. According to the Autism Society of America’s (2007) report, children may have an average to above average intelligence, while others are below average and mentally retarded, requiring 24/7 care and assistance. The NIH (2008) highlighted that one aspect of social impairment affecting individuals with autism can include non-responsiveness when spoken to by others. The Autism Fact Sheet Report (2008) identified complexities for individuals with autism failing to respond to their name, display empathy toward others, and the inability to identify social cues while in various environments. Behaviorally, individuals on the autism spectrum can display a variety of repetitive behavior to include highly restricted, fixated interests that are deemed clinically abnormal, adherence to routines, and stereotyped and repetitive speech (Perry & Taheri, 2012). Departments of Education are gravely concerned with the rising numbers because children are entering classrooms with teachers concerned with the lack of proper training to educate various levels and abilities involved with this population (Nwokeafor, 2009).
Ensuring a quality of life to include designing a curriculum so an individual can learn to their optimal level is the responsibility of the educator. Educating individuals with autism has continued to pose challenges to both parents and teachers, and to some extent community members where individuals with autism are raised. According to Kimball (2002),

Children with autism are as different from each other as they are from typically developing children, nonetheless, to varying degrees these children share certain defining characteristics with respect to communication, socialization, and motoric issues, and they do, as a group, benefit educationally from one comprehensive approach. (p. 66)

Kimball eloquently described individuals with autism, encompassing various abilities and degrees of severity that require a systematic and comprehensive teaching approach, and increasing demands of individuals educating those individuals with autism.

This study was guided by the research questions to provide a thorough review of the literature pertinent to the personnel selection process, especially for those who teach students with autism. The researcher’s intention was to identify the characteristics of successful staff at the Cleveland Clinic Center for Autism, Lerner School, which is a center-based school program for individuals with autism. Based on research conducted by Beutel et al. (2010), expectations of educators and administrators can infuse the educational environment for the better. Reflection from the research participants’ day-to-day interactions with individuals with autism will offer insight for hiring administrators looking to identify key characteristics of successful educators. The outcome from this study could potentially lead to the development of an interview protocol that aligns with
the qualities of qualified teacher candidates desired by the hiring administrators at the Lerner School.

Autism is a complex disorder that challenges the education of an individual. Individuals affected by the disorder seldom function at an adequate level; they often exhibit poor social skills and display marked deficits in language (Matese, Matson, & Sevin, 1994). Daily efforts are made to provide lasting solutions to the trials confronted by individuals with autism, and their families and educators. Empirical clinical research has provided interventions. Some of them have been in the form of using effective drugs or behavioral skills, and in some cases both drugs and behavioral skills to condition autism patients. Another area of interest is demonstrating effective practices for assessing and evaluating individuals with autism (Nwokeafor, 2009).

However, these services can be very expensive and pose a roadblock for families whose children require intensive educational services but lack the funding stream to offset the cost. For example, in New York City, eight children ranging in age from 5-11 who attend the Brooklyn Autism Center Academy required intensive individual instruction presenting slow and arduous academic progress (Fairbanks, 2009). Several of the families were unable to maintain educational placement for their son or daughter due lack of funding. Although individuals affected with autism can have a slow learning curve, the effects of his or her progress, both educational and behaviorally, are limited without the benefit of intensive services. Learning requires several components to include patience, communication, involvement, and concentration on the part of the child (Nwokeafor, 2009). Unfortunately, school districts are not consistently expected to
provide specialized programs for individuals affected with autism in order to optimize their learning experience and achievement (Fuchs & Fuchs, 1994).

**Statement of the Problem**

With the increasing rate of individuals diagnosed with developmental disabilities, the educational demands will continue to increase over time (Cox, 2001). Researchers are scrambling to find effective educational strategies for individuals afflicted with a disability, especially individuals with a spectrum of complexities (Boutelle, 2008). As a result, school districts are increasingly expected to contend with these increasing educational demands of all individuals. According to Little and Miller (2007), school districts require a structured process for identifying and selecting qualified staff. Simultaneously, research conducted by Little and Miller suggested there are limited data to record the personnel selection within the education sector.

Engel and Erion (1984) found that school administrators understood that hiring quality educators was fundamental to the academic success of operating schools. Typically, districts use the identical employment interview instruments utilized for regular education teachers, regardless of the differences in job responsibilities and student population. However, utilizing the equivalent interview instrument for hiring individuals for various disability populations is inappropriate, since the skill levels required of the teacher will vary based on the disability (Eder, 1999). Presently, there are no commercially available interview instruments designed for intervention specialists (Beutel et al., 2010).
The personnel selection process for intervention specialists requires specialized attention since it is singularly dependent on personal characteristics of the educator (Sapir & Wilson, 2001). Personnel interviews are useful for assessing a candidate’s communication style, teaching experience, and interpersonal skills, but are flawed because they can be too subjective and cover a narrow view of the candidate (Beutel et al., 2010). The question then becomes how the hiring administrator will select the appropriate candidate.

Several key topics the hiring administrator may request from the candidate can include examples of previous educational commitments, examples of the candidate participating with others as a team member, and communication style with a parent or legal guardian. Lee (2005) noted that one aspect of gaining a competitive edge in the hiring process of high quality staff is recognizing that the recruitment of the best talent available is a strategic imperative, not an option.

**Purpose of the Study**

A case study research design was used to identify characteristics of successful Classroom Behavior Therapists (CBTs) currently employed at the Lerner School, housed in the Cleveland Clinic Center for Autism, which is a center-based school program for individuals with autism. The goal of the study was to assist administrators in selecting the most desirable candidates to work with individuals attending the Lerner School. According to Cohen and Gump (1984), the focal point for staff selection has been the interview process. This is supported by research conducted by Vornberg and Liles (1983), who indicated that at least 85% of educational administrators regard the
employment interview process as a critical factor in hiring teachers. Stough and Palmer (2003) identified loopholes in the literature pertaining to detecting qualities of exceptional intervention specialists. This lack of data can be attributed to the complex role of the intervention specialist (Beutel et al., 2010).

Using a qualitative research design, the researcher interviewed and observed successful Classroom Behavior Therapists (CBTs) to assist administrators in determining the most appropriate screening process for future candidates. Hopkins and Stem (1995) proposed pinnacle characteristics of high quality candidates as having dedication, care for children, mastery of various teaching models, collaborative efforts with other teachers, and the ability to reflect on their own teaching behavior. This study presents core characteristics of successful CBTs. Identifying core characteristics of the teaching staff will increase the odds that the hiring administrators will identify the proper candidates based upon their responses to the interview questions.

**Research Questions**

This study focused on the personnel selection process used to select quality CBTs by identifying key characteristics as defined through the participants in this study. In addition, an interview instrument was developed and the questions were justified by hiring administrators. One primary question guided the study and was operationalized through the creation of two subquestions:

1. What are the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?
1a. What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1b. What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

Assumptions

The researcher made two assumptions regarding this study. First, the researcher assumed that the professionals responding to the researcher would provide truthful statements regarding daily work experiences. For example, if a participant suggested that they were highly supported by their supervisors and provided the necessary materials to complete the work, then the participant was responding honestly. The researcher was hopeful that all participants would be as honest as possible regarding their responses, especially since the researcher also serves as the participants’ supervisor. From the researcher’s perspective, the participant responded truthfully and provided accurate information.

The second assumption assumed was the participating professional’s range of experience in regards to age, gender, and spectrum of autism. For example, the researcher did not critically review participants’ history of work experience either prior to or during employment at the Lerner School. With this said, the researcher assumed that the participants would include various responses and experiences to enhance the research study outcomes. According to Sapir and Wilson (2001), “Those who can’t explain basic
answers to the interviewer, or who have had no previous experience with the topics, won’t be successful with the necessary demands of teaching” (p. 23).

**Definition of Terms**

This section provides definitions and abbreviation of terms used in this study,

*Applied Behavior Analysis.* Applied Behavior Analysis (ABA) is the direct application of behaviorism to the improvement of human behavior (Cooper, Heron, & Heward, 2007).

*Assistant Director.* This individual assists the CCCA Program Director in the daily operation of the Center for Autism, including the development and implementation of child-specific curricula designed to master an IEP. This individual assumes duties of Program Director in his/her absence, provides daily supervision for all center staff and students, including all CBTs; oversees design and implementation of all aspects of behavior management techniques and reduction plans; oversees staff orientation and training program, as well as ongoing skill development for all program personnel. The individual works in collaboration with Program Administrator and Coordinator of Educational Services to ensure smooth program operation.

*Autism.* For the purposes of this study, an individual with autism will have a moderate to severe diagnosis of autism accompanied with challenging behavior that has severely impacted his/her ability to learn in a natural setting. Clinicians can identify if an individual has moderate to severe autism by completing The Childhood Autism Rating Scale (CARS). The CARS rates individual functioning in 15 categories. A higher score indicates a higher severity level of autism. The individuals attending the Lerner School,
the research setting for this study, have not been educationally or behaviorally successful in other educational settings for several reasons to include but not limited to: (a) little to no progress on an IEP within a school year, (b) challenging behavior interrupting the individual’s ability to acquire skills, (c) increased cognitive impairment, and (d) an inability to communicate basic wants or needs. As a result, the Lerner School provides the educational and behavior management these individuals require based on their increased skill development in all areas of growth.

*Behavior.* The activity of living organisms. This includes everything that people do (Cooper et al., 2007).

*Case study.* An analytical focus on an individual, group, activity or event whose values lies in facilitating appreciation of those events and phenomena (Schram, 2006).

*Classroom Behavior Therapist (CBT).* For the purposes of this study and the current research site, the term CBT was used. The CBT does have a bachelor’s degree or higher either in education, psychology, speech and language, or a related field. The CBT implements specific curricula designed to work toward each child’s IEP; monitors individual and group programs, and provides day-to-day student supervision through the principles of applied behavioral analysis. The CBT is responsible for the student’s safety, daily schedule, and progress as well as his or her own professional growth. Specific job related duties of a CBT include the following: (a) acquire baseline data and implement approved program using behavioral technology appropriately, neutrally and consistently; (b) baseline, track and record child’s progress as indicated during therapeutic management by maintaining daily records including daily collection of teaching data and
behavior management data, as well as graphs on all teaching and behavior programs; (c) assess, develop, and implement on-going novel and age appropriate reinforcement for students; (d) apply reinforcement appropriately and specifically throughout the day for students in the program; and (e) assist in organizing and participating in structured group activities utilizing leader-prompter model and reinforcement; (f) create and edit therapy reports in a timely manner according to department deadlines; (g) administer assessments under the supervision of the teacher or appropriate staff as deemed necessary by program guidelines; (h) assist in creating and implementing individual educational plans for each student and attend conferences as needed/requested by supervisor; (i) develop and implement individualized schedules for each student; (j) identify, analyze, and troubleshoot individual student’s program including curricula, behavior, and environmental considerations; and (k) maintain professional communication with families through authorized daily notes and phone calls. For other programs or schools for individuals with autism or individuals with disabilities, the term CBT may be replaced with another title; however, the job duties may be similar as it relates to working with individuals with autism (CCCA, Job description).

Constructivism. Constructivism is defined as people depicted as creators of their current knowledge, learning through experience, and personal reflection based on their experience. When we encounter something new, we have to reconcile it with our previous ideas and experiences, maybe changing what we believe, or maybe discarding the new information as irrelevant. To do this, we must ask questions, explore, and assess what we know (Meyer, 2009).
Coordinator of Educational Services. The Coordinator of Educational Services works in collaboration with the Assistant Director of the school program and the center’s Program Director to establish and implement specific curricula relevant to each child’s Individual Education Plan; design and monitor individual and group programs, and provide day-to-day supervision for all center staff and students including the Coordinating Teachers and all CBTs. The Coordinator of Educational Services supports staff, develops curriculum and behavior programming, and serves as a communicator between the students’ home, school district, and the Center (CCCA, Job description).

Coordinating Teacher. The Coordinating Teacher works with the Coordinator of Educational Services to design specific curricula to work toward each student’s IEP and monitors individual and group programs. This position also provides support and direction for all CBTs (CCCA, Job description).

Interactive Skills: The definition of interactive is action and communication between two people or two things, such as two-way communication. (Yourdictionary.com, 2014).

Lerner School: The state-of-the-art Lerner School for Autism is the centerpiece of the 20,000-square-foot Debra Ann November Wing at our Hospital for Rehabilitation Campus. This chartered, non-public day school, certified by the state of Ohio, serves students from diagnosis to age 22. Staff include: (a) board-certified behavior analysts, (b) certified intervention specialists, (c) classroom behavior therapists, (d) pediatric psychologists, and (e) speech/language pathologists. The educational program emphasizes research-supported autism intervention, based on the philosophy and
interventional techniques of ABA. The Lerner School provides the following services: (a) full-day, year-round program, (b) highly individualized programs, (c) low student-to-staff ratio, (d) strong parental involvement, and (e) tiered levels of instruction

*Lerner School Acceptance Requirements*: Once an individual is referred for services whether by the school district or the family, an individual is not immediately accepted into the Lerner School. Lerner School Administration review each case and communicate the results to the families and districts when appropriate. The Lerner School uses the following criteria in the process of accepting individuals into the school program: (a) the required staff to student ratio, which may be 1:1, 1:2, 1:3 in order to provide appropriate services both educationally and behaviorally; (b) the age of the individual seeking educational services; (c) whether the individual meets diagnostic criteria for moderate to intensive autism; (d) whether comorbid disorders other than autism are present; (e) medical complexities; (f) the parent/guardian must agree with the educational philosophy of ABA; and (g) what are the safety ramifications regarding management the individual to themselves, staff, and others. In addition, based on the individual’s educational and behavioral profile, the Lerner School must have an opening available in the appropriate classroom that will serve the needs of that individual. It is at the discretion of the Lerner school Administration to accept or deny individuals into the program.

*Mentor Classroom Behavior Therapist*: For the purposes of this study, mentor CBTs encompassed the following criteria: (a) completed the consent form for the research study (see Appendix C); (b) earned the highest overall scores on interview
protocol utilized when they were hired; (c) were employed as a CBT for at least one year; (d) participated and completed the Center’s mentorship program; and (e) received an overall annual evaluation score of Fully Meets. Mentor CBTs attend an intense three-hour training with Administration to review the training protocols when assigned a novice CBT. At any point, mentor CBTs can be dismissed from the mentorship program if not following procedures. Novice CBTs and Mentor CBTs have identical job descriptions; the difference lies in the experience level at the Lerner School.

Novice Classroom Behavior Therapist: For the purposes of this study, novice CBTs were those employed at the Lerner school for one year or less, and had basic training and education related to autism and applied behavior analysis. Novice CBTs are assigned mentor CBTs for the first 90 days of their employment, and at any given time are consistently acquiring new information and knowledge as it relates to their student(s). Novice CBTs and Mentor CBTs have the identical job description; the difference lies in the experience level at the Lerner School.

Peer Professional Program (P3): All new staff at The Lerner School are assigned a mentor for the first 90 days of their new hire period. The program has been instrumental in supporting new staff at the Lerner School in both clinical and professional development. The program also provides new staff with the opportunity to develop a professional relationship with colleagues aside from their direct supervisors who have had extensive experience serving individuals at the Lerner School. In addition, the P3 program has a specified training protocol that requires documentation throughout the 90-
day mentorship period, and is then returned to the program Coordinator illustrating that the mentor and mentee have completed the program.

*Personal Efficacy.* Defined as the belief in one's capabilities to achieve a goal or an outcome and getting the job done (Margolis & McCage, 2006). An individual’s personal belief that a task can be accomplish with commitment, motivation, and an “I can do it” attitude. In addition, a person is not necessarily born with these internal characteristics. However, once an individual identifies they encompass these traits, they continue to build on them for long-term success.

*Professionalism.* Kramer (2003) suggested that there are three categories of teacher professionalism: attitude, behavior, and communication. These three areas cover a wide range of behaviors and characteristics including timeliness of teachers, dressing appropriately, and clearly communicating with colleagues, parents, and students. Sockett (1993) identified five categories of professionalism consisting of (a) character, (b) commitment to change and continuous improvement, (c) subject knowledge, (d) pedagogical knowledge, and (e) obligations and working relationships beyond the classroom.

*Professional Knowledge.* For purposes for this study, professional knowledge was defined as “the historical, economic, sociological, philosophical, and psychological understandings of schooling and education. It includes knowledge related to learning, diversity, technology, professional ethics, legal and policy issues, pedagogy, and the roles and responsibilities of the profession of teaching.” Professional knowledge is also referred to as pedagogical content knowledge (Ask.com, 2014).
Promising Practices. A promising practice is a behavioral intervention that appears effective but lacks evaluative data to support its accuracy in the literature (Simpson et al., 2005). A promising practice has the potential to become evidence-based and is acknowledged as an emerging practice.

Senior Classroom Behavior Therapist (SRCBT). The Senior Classroom Behavior Therapist implements specific curricula designed to work toward each child’s IEP, monitors individual and group programs, and provide day-to-day student supervision through the principles of applied behavioral analysis. The SRCBT is responsible for the student’s daily safety, schedule, and progress as well as his or her own professional growth. Training of novice CBTs, as well as on-going training of a current CBT and mentorship, is also the responsibility of the SRCBT if selected by administration. This individual may also collaborate on improving center-based-wide processes such as data collection methods (CCCA, Job description).

Successful. Subjective success refers to an individual’s feelings about his/her accomplishments (Gattiker & Larwood, 1986; Peluchette, 1993). The notion behind subjective success implies that individuals measure how successful they are according to personal criteria. Successful means accomplishing what you set out to do, or achieving a certain desired status. For the purposes of this study, success was defined as the CBT meeting the following requirements: (a) Completed the consent form for the research study, (b) Earned the highest overall scores on the interview protocol utilized when they were hired into their current position, (c) Employed as a CBT for at least one year, (d) Participated and completed the Lerner School Mentorship program, (e) Received an
overall annual evaluation score of Fully Meets, (f) completed the initial two week training program upon hire, and (g) completion of the Peer Professional Mentorship Program (P3).

**Triangulation.** According to Denzin (1978), triangulation in qualitative analysis is used to strengthen the internal validity of a study. Triangulation can make use of multiple sources of data to include comparing and cross checking data collected through observation across various times and/or places, or interview data collected from a variety of people with diverse perspectives (Merriam, 2009).

**Summary**

“Good teaching cannot be reduced to technique: good teaching comes from the identity and integrity of the teacher” (Palmer, 2007. p. 9). Identifying the characteristics of good teachers is vital when working with students, especially the autism population, and meeting the needs of these individuals. The results of this qualitative study identified: (a) the characteristics of teaching staff at the Lerner School, (b) characteristics defining successful teaching staff and aligned these outcomes with the interview protocol currently being utilized in the interview process, and (c) the perspective and feedback of the existing staff who are perceived as successful staff in their positions. Not all educators are well suited to teach individuals with autism. Therefore, the importance of defining CBT characteristics and developing an interview instrument separating exemplar educators from mediocre is essential. As a result, hiring administrators have a higher percentage achieving success when an aggressive hiring approach is executed with the best sought out education talent at the forefront (Lee, 2005).
Chapter II provides a comprehensive overview of literature that addresses several areas to include: autism, characteristics of intervention specialists, and the personnel selection process. Chapter III describes the methodology for this study. Chapter IV will provide the data analysis, and an in-depth overview of the findings. Chapter V will report and summarize the findings of the study.
CHAPTER II
REVIEW OF RELATED LITERATURE

This review consisted of an analysis of the literature related to the research
problem, which was to identify the characteristics of effective Classroom Behavior
Therapist’s (CBTs) delivering services to individuals with autism. The research study
included one leading question and two sub questions pertinent to the personnel selection
process:

1. What are the personal and professional characteristics of successful classroom
behavior therapists working in a self-contained setting with individuals who have
moderate to severe autism?

1a. What are the personal and professional characteristics of successful novice
classroom behavior therapists working in a self-contained setting with individuals
who have moderate to severe autism.

1b. What are the personal and professional characteristics of successful mentor
classroom behavior therapists working in a self-contained setting with individuals
who have moderate to severe autism.

With limited research on the personnel selection process or an effective interview
protocol, a review of literature on the following topics provides the framework for this
study and is included in this chapter: (a) Autism Spectrum Disorder, (b) the
characteristics and characteristics of effective intervention specialists, and (c) the personnel selection process for teachers (Beutel et al., 201).

**Historical Perspective of Autism Spectrum Disorder**

In the early 1900s, Swiss psychiatrist, Eugen Bleuler made the first reference to autism-like symptoms when describing patients as withdrawn and isolated from others (Lyons & Fitzgerald, 2007). In 1943, Dr. Leo Kanner became the first individual to apply the term Early Infantile Autism Spectrum Disorder to describe his patients who were challenged with communicating both expressively and receptively, and were engaged in fixated behavior (Kanner, 1971). Starting in the late 1960s, autism was established as a lifelong disorder and as a separate syndrome, distinguishing it from mental retardation, schizophrenia and all other developmental disorder (Fombonne, 2003). Under the autism umbrella, Kanner (1971) defined autism with the following characteristics: lack of or deficits in language development; a need to maintain a consistent environment (no changes); stereotypical and repetitive patterns of behavioral sequences, such as hand flapping or rocking; good intellectual abilities in very restricted areas; and little to no spontaneous play. Presently, autism is a lifelong disorder without a cure (Inglese & Elder, 2009).

Although Kanner’s research led him to believe that individuals with autism were close to average intelligence, this is often not true (Rutter, 1983). According to empirical investigations, approximately 80% of children with autism score below 70 on a standardized intelligence assessment, falling within the range of mental retardation (Ghaziuddin, Tsai, & Ghaziuddin, 1992). Powers (2009) indicated that research and best
practice affirms that a successful educational program for individuals with autism require an all-inclusive assessment and services delivered by well-trained professionals.

Autism is a complex disorder that challenges the education of individuals across all ages. A child affected by the disorder has seldom functioned at an adequate level; they exhibit poor social skills and display marked deficits in language (Matese et al., 1994). Daily, efforts are made to provide lasting solutions to the trials confronted by individuals with autism, and their families and educators. Empirical clinical research has provided interventions. Some of them have been in the form of drugs or behavioral skills, and in some cases, both drugs and behavioral skills are used to condition autism patients.

Another area of interest to bringing awareness to autism disorder is by demonstrating effective practices for assessing and evaluating students with autism (Nwokeafor, 2009). However, these services can be very expensive and pose a roadblock for families whose children require intensive educational services but lack the funding stream to offset the cost. For example, in New York City, eight children ranging in ages from 5 to 11 who attend the Brooklyn Autism Center Academy required intensive individual instruction, presenting slow and arduous academic progress (Fairbanks, 2009). Several of the families were unable to maintain educational placement for their son or daughter due to unavailable funds. Although the child affected has a slow learning curve, the effects of his or her progress both educational and behaviorally without the intensive services present an even higher detrimental outcome. Learning requires several components to include patience, communication, involvement, and concentration on the part of the child (Nwokeafor, 2009). Unfortunately, school districts are not held to a higher standard in
providing specialized programs for individuals affected with autism to carry out these components and assist individuals in need (Fuchs & Fuchs, 1994).

**Diagnostic Criteria for Autism Spectrum Disorder**

The diagnostic criteria for autism has surfaced in several editions of the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual (DSM). The most significant changes thus far have occurred in the DSM-IV, which referred to the terms Autism Spectrum Disorder, Asperger’s Syndrome, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS). In 1994, the DSM-IV provided additional modifications, which included diagnostic criteria for high and low functioning individuals affected by the disorder. PDD-NOS appears as “atypical personality development,” “atypical PDD,” or “atypical autism,” which encompasses cases where there is marked impairment of social interaction, communication, and/or stereotyped behavior patterns or interest or when full features for autism or another explicitly defined PDD are not met (APA, 1994; Yale Child Study Center, 2013). Historically, PDD-NOS is used when the clinician suspects the individual is on the cusp of a diagnosis but has not met the criterion for an autism diagnosis.

According to the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Text Revision* (DSM-IV-TR; APA, 1994), an individual diagnosed with autism has to have at least six developmental and behavioral characteristics, symptoms evident before age three, and no evidence of other conditions that were similar. The DSM-IV-TR defined autism as follows:

(I) A total of six (or more) items from (A), (B), and (C), with at least two from (A), and one each from (B) and (C): (A) qualitative impairment in
social interaction, as manifested by at least two of the following: 1. marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction; 2. failure to develop peer relationships appropriate to developmental level; 3. a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people), 4. lack of social or emotional reciprocity (note: in the description, it gives the following as examples: not actively participating in simple social play or games, preferring solitary activities, or involving others in activities only as tools or "mechanical" aids;

(B) qualitative impairments in communication as manifested by at least one of the following: 1. delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime), 2. in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others, 3. stereotyped and repetitive use of language or idiosyncratic language, 4. lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level;

(C) restricted repetitive and stereotyped patterns of behavior, interests and activities, as manifested by at least two of the following: 1. encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus, 2. apparently inflexible adherence to specific, nonfunctional routines or rituals, 3. stereotyped and repetitive motor mannerisms (e.g.: hand or finger flapping or twisting, or complex whole-body movements), 4. persistent preoccupation with parts of objects. (II) Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (A) social interaction, (B) language as used in social communication, (C) symbolic or imaginative play. (III) The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder. (pp. 70-71)

Freeman and Ritzi (1984) described autism as a group of developmental disabilities characterized by impairments in social interaction and communication and by restricted, repetitive, and stereotyped patterns of behavior. Symptoms typically are apparent before age three, suggesting autism symptoms gradually become more evident
between the ages of 12 to 36 months. Symptoms at this age may vary widely in severity and go unrecognized especially in mildly affected children, which can easily mask the disorder. For example, children who develop ritualistic patterns of behavior and communication challenges may fit the prototype of autism. However if the individual is socially age appropriate, then the likelihood the individual has autism is slim to none.

According to Nwokeafor (2009), the social and mental welfare of individuals with autism is often challenged and impaired. Consequently, this stigmatizes individuals and the manner in which their education is delivered. In fact, policies have been endorsed and practices have improved to meet the needs and the concerns voiced by parents who have children with autism (Barber, 2009). Political solutions do not solve all educational challenges for individuals effected with autism; however, they are providing some assistance. The research findings have a direct burden regarding the need for health, education, and social services, including the need for more specialized health services (mental health services, medical specialists, therapists, and allied health professionals).

**Autism Spectrum Disorder and a Need for Change**

In May 2013, the DSM-IV-TR underwent revisions in several psychological disorders, including the diagnostic criteria for autism. The diagnostic criteria for autism was approved in May 2013, and is currently integrated into clinical practices globally. With each consecutive publication, attempts have been made to enhance diagnostic precision based on a current understanding of the disorder derived from both research and clinical practice. The proposed modifications have clear empirical support, driven from massive literature reviews and secondary data analyses from researchers in the field.
(Ozonoff, 2012). “All revisions of the DSM have been undertaken to improve accuracy of classification and the current revision is no exception” (Ozonoff, 2012, p. 1093). Along with other disorders, the criteria for autism has been substantially revised based on the dramatic changes in prevalence over the past decade (Ozonoff, 2012). One of the most eminent changes in the Diagnostic and Statistical Manual Fifth Edition (DSM-5) is merging Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS) with the autism category. Therefore, individuals who have received a PDD-NOS diagnosis with the previous diagnostic criteria may challenge the new diagnostic criteria.

Several of the changes in diagnostic criteria from the DSM-IV-TR to DSM-5 have included combining the three categorical domains of autism including social, communication, and repetitive behavior, and wrapped them into two domains: social-communication and repetitive behaviors. The total number of symptoms simplified from 12 to seven came as a result from combining the criteria identified in the DSM-IV-TR (e.g., limited social-emotional reciprocity, limited sharing of interests, and reduced back-and-forth conversation are combined into one reciprocity symptom; Ozonoff, 2012).

Additionally, the stipulation of severity in autism was altered in the DSM-5. This enhanced the nature of the disorder and the individual variations that differ in quality, not quantity (e.g., intensity and duration of symptoms, degree of impairment, and distress they cause; Ozonoff, 2012). With the various changes in the criteria for autism, a new category was developed in the DSM referred to as Social Communication Disorder. This category was conceived to provide coverage for individuals who present deficits in
social-communication but do not display the repetitive and stereotypical behaviors, which would result in an autism diagnosis. (Ozonoff, 2012).

However, in preliminary studies of the new diagnostic criteria, Mandy, Charman, Gilmour, and Skuse (2011) confirmed that the prevalence of individuals who could be excluded from services was high. The rationale behind many of the changes to the DSM-5 is to enhance diagnostic consistency and improve the stability of autism over time. “The DSM-5 Neurodevelopmental Work Group is that, although differentiation of autism from typical development and other childhood disorders is done reliably and validly, the distinction between the three categories has been found to be inconsistent and to vary across sites” (APA, 2011). There is a possibility that many of the children who would no longer meet autism criteria under DSM-5 would instead meet criteria for a diagnosis of the proposed DSM-5R Social Communication Disorder (SCD; Aldridge, Chandler, Gibbs, Smith, & Witzlsperger, 2012).

The impact of the DSM-5 changes to the autism diagnostic criteria does bring uncertainty. One preliminary research finding suggested a reduction in the number of individuals who will meet autism criteria under DSM-5 (Gibbs, Aldridge, Chandler, Witzlsperger, & Smith, 2012). The results of Gibbs et al. (2012) were based solely on parent-informant checklists opposed to a comprehensive diagnostic assessment. On the other hand, the APA (2012) has indicated that the field studies regarding the DSM-5 have not found any such reduction. Regardless of how one perceives the issue, the changes occurring in the DSM-5 are a legitimate concern for parents, clinicians, and researchers alike (Kuhl, Kupfer, & Regier, 2011; Swedo et al., 2012).
Prevalence

In recent years, concern has markedly escalated concerning the extent and causes in the prevalence increase of autism in the United States and other countries (Newschaffer, Falb, & Gurney, 2013). In 2008, the National Institute of Neurological Disorders and Stroke Fact Sheet estimated, three to six children out of every 1,000 will have autism (Nwokeafor, 2009). In 2012, autism statistics from the CDC identified that 1 in 88 Americans have a diagnosis of autism, compared to the rate of 1 in 110 identified in 2006 (CDC, 2012). An estimated 1 in 54 American boys have an autism diagnosis (CDC, 2012). With this increased number, males are four times more likely to have autism than females (NINDS, 2007).

According to Mayo Clinic’s research, autism is one of a group of serious developmental problems encountered by children of a given age (Nwokeafor, 2009). It adversely affects their mode of focus, communication, and interactions with other children and adults (Nwokeafor, 2009). According to the U.S. Government Accountability Office (2005) confirmed autism increased by more than 500% over the last decade. Contributing factors to the increase in prevalence is attributed to a number of factors including (a) better diagnosis, (b) a broader definition of autism disorder, and (c) no doubt a genetic component exists (Nwokeafor, 2009). According to Rudy (2008), with a genetic component, autism is likely to run in families especially since “siblings of people with autism are more likely to be autistic and twins are more likely to share autistic traits” (p. 7). Additionally, a sibling or parent diagnosed with autism sets the stage for a child to have a higher risk of receiving an autism diagnosis (CDC, 2012).
Croen (2008) concluded that there have been numerous genetic studies completed with no gene identified as a single autism gene. Although researchers are certain that genetics is the cause, developing cures or potential treatments are way off.

Causes

Researchers have been scrambling to find effective strategies to educate individuals with autism and stumble upon the possible causes for the skyrocketing numbers (Boutelle, 2008). This increase in autism presents a challenge to the nation’s special education service systems and is one that has systematically triggered responses from federal, state, and local agencies (CDC, 2004). According to the CDD (2012), the cause of autism is unknown. However, the CDC has unveiled that a child is more likely to develop autism due to environmental, biologic and genetic factors (CDC, 2012).

Nwokeafor (2009), who has demonstrated a vast interest in identifying causes of autism, suggested autism has a strong genetic component. Nwokeafor explained, “autism has a strong genetic basis which is considered complex. Based on a series of genetic research outcomes, it is unclear whether autism is attributed to multigene interactions or mainly by rare mutations” (p. 1). Nwokeafor claimed many research institutions have invested time and resources over the years in an attempt to conduct clinical research on what might be the remote causes of autism.

As early as the mid-1970s, there was little evidence of a genetic role in autism; however “the susceptibility to all major psychiatric disorders is, at least in part, genetic” (Belzen & Heutink, 2006, p. 1). By identifying the gene or genes involved, a better understanding of the steps from gene product to phenotype will be possible. This will
lead to improvements in diagnosis, an opportunity for thoughtful family planning, and perhaps, most important, to the development of treatments based on an understanding of the biochemistry of the disorder (Jones, MacLean, Szatmari, MacLean, & Zwaigenbaum, 1998).

Rudy (2008), Powers (2009), Croen (2008), Just and Minshew (2009) have conducted multiple research studies leading to various outcomes. Rudy found “irregularities in several regions of the brain of children with autism by several studies which suggested that children with autism have abnormal levels of serotonin or other neurotransmitters in the brain” (p. 6). However, Rudy’s research alone has not been able to solidify the causes of autism. Through ongoing clinical research geared toward identifying the possible causes of autism, the challenge is present. As a result, genetic, biological, and environmental considerations are highly plausible factors with “abnormalities resulting from the disruption of normal brain development early during the pregnancy of a child as the fetal develops” (Rudy, 2008, p. 6).

Currently, the CDC is conducting one of the largest U.S. studies to date referred to as the Study to Explore Early Development (SEED).

SEED is a valuable resource for testing hypotheses regarding autism characteristics and causes, monitors and tracks the number of people diagnosed with autism over time to determine if the number is rising, dropping, or staying the same. SEED can also compare the number of children with autism in different areas of the country and among different groups of people. Data collected from SEED will supply information regarding causes of autism and can help communities plan for services. (CDC, 2012, p. 1)

Research published throughout various medical journals emphasizes the significant impact of the ailment to individuals diagnosed with autism. Schendel et al. (2012) studied
children aged 2-5 years with autism, using two groups: one from the general (typical) population and one with non-autism developmental problems. Data were collected from parent-completed questionnaires, interviews, clinical evaluations, and medical record abstractions that focused on the prenatal and early postnatal periods. Considering the various prognosis and the probable causes of autism, it seems likely, given the amount of research so far conducted by several organizations that several factors are combined to cause autism.

**Scientifically Based Intervention: Applied Behavior Analysis**

While there is no cure, autism is treatable. “In today’s modern society driven by technological innovations, the development in scientific and medical research and the preparation of highly skilled doctors, nurses, caregivers and special educational teachers have helped tremendously in gaining considerable insight into autism” (Nwokeafor, 2009, p. 13). According to Schwartz, Sandall, McBride, and Boulware (2004), the significance of early intervention for children with autism is in direct relation to the overall benefits of an increased quality of life. Schwartz et al. suggested a minimum of 25 to 40 hours a week of intensive early intervention for children is required to reap the benefits of the therapy.

Schwartz et al. (2004) developed one of the earliest and most successful early intervention programs referred to as Project DATA. Project DATA stands for Project Developmentally Appropriate Treatment for Autism and has five distinct components to include:

1. integrated early childhood Forum on Public Policy 12 programs for about 12 hours a week; 2. extended intensive instruction. Preschoolers in Project DATA
attend three days a week extended school day; (3) technical and social support for families; (4) collaboration and coordination across services; and (5) transition planning and support. (Nwokeafor, 2009, pp. 11-12)

Although Project DATA is only one of multiple early intervention programs, the significance of this program is its sustainability over time because of its consistent outcomes (Nwokeafor, 2009).

Lovaas’ (1987) philosophy falls in line with Schwartz et al. (2004) in that “clinical and empirical research results have shown that early diagnosis coupled with intensive intervention campaigns can go a long way to improving the skills of many children with autism in a variety of areas” (Nwokeafor, 2009, p. 3). The issue among autism stakeholders is not whether individuals affected with the disorder require specialized practices, intervention, and treatments, but rather, which of the specialized methods developed for children and adolescents with autism-related disabilities are the most efficient, effective, and suitable (Osborne & Reed, 2008). In an effort to provide lasting solutions to the challenges faced by children with autism who are of school age, empirical clinical research has identified effective interventions (Nwokeafor, 2009). For example, Lovaas’ therapy (1987) is a scientific method of teaching individuals with autism the basic building blocks necessary for learning. The goal of Lovaas’ (1987) therapy is to educate children “by developing skills in attending, imitation, receptive/expressive language, pre-academics, and self-help” (p. 11).

Secondly, if the education system has a certain expectation level of instruction for the autism population, then intervention specialists will have to possess the skills to carry out instruction with the students. According to Smith (2005), educational standards have
been developed for administrators, program designers, and educators themselves to rightfully assess whether targeted benchmarks are being attained. By offering supported classrooms and meeting the specific needs of the children, this will permit an intervention specialist to navigate through the challenges posed by the disorder.

Powers (2009) concluded that research and best practice illustrate that a successful educational program for individuals with autism requires comprehensive assessments and intensive services endorsed by highly trained professionals. The National Dissemination Center for Children with Disability (NDCCD) (2008) and Powers’ (2009) research both emphasized the need for specially trained teachers who understand this complex disorder to teach individuals with autism.

With the exploding number of individuals diagnosed with autism, educators need to examine “the quantity of ineffective interventions of educational services provided to students with autism enrolled in public schools” (Heflin, Ivey, & Kristen, 2008, p. 1). Unfortunately, many interventions utilized with individuals with autism lack the data to support treatment effectiveness (Heflin & Simpson, 1998). Simpson et al. (2005) evaluated the scientific evidence for 37 interventions and treatments for individuals with autism. Interventions were divided into four broad categories to include (a) scientifically based, or those with evidence of benefit following substantial, scrupulous research; (b) promising practice, those that have been used for time with no or limited adverse results and/or have research; (c) limited supported interventions for practices; and (d) non-recommended treatments. The findings of this study suggested that teacher trainers, administrators, and educators within institutions of higher education should make it
imperative to provide more instruction related to scientifically based and promising practices when teaching individuals with autism. Furthermore, research should continue to document the types of strategies utilized in different settings serving individuals with autism since every individual learns differently. Lastly, “those in leadership positions in the public and private schools should receive training regarding best practices for teaching” so the education baton can be passed on and improved to better serve the autism population (Heflin et al., 2008, p. 970).

“As a brain development disorder, children with autism find it very challenging to learn in the same classroom setting with children without autism” (Nwokeafor, 2009, p. 9). Nwokeafor (2009) addressed this concern because he firmly supported the position that individuals with autism reserve the right to be given the opportunity to obtain education in a specialized program that accommodates individuals’ challenges. Since individuals with autism learn differently from one another, the traditional model with the teacher standing before the students delivering instruction should not be encouraged.

Rather, interventions providing these individuals with the opportunity to learn as individually as possible with a tailored curriculum and a behaviorally designed environment would serve them best (Halliday, 2008). Both empirical and clinical research outcomes indicate that when individuals with autism engage in challenging behaviors, they are not able to focus on other stimuli, such as educational instructions, due to distractions. Therefore, autism drastically affects both the developmental and learning processes of younger children (Nwokeafor, 2009).
Established Promising Practices for Individuals with Autism

Numerous controversial and unsupported treatments plague the field of autism, resulting in wasted time, energy, and funds (Elia et al., 2009). Many interventions and treatments used with individuals with autism do not have empirical evidence to substantiate their effectiveness (Heflin & Simpson 1998) and may waste resources, as well as preclude the provision of worthwhile interventions in schools (Simpson et al., 2005). Interventions used regularly are referred to as promising practices or emerging practices. Promising practices are methods that have emerged as having “efficacy and utility with individuals with autism” (Simpson et al., 2005, p. 9). Practices with limited supporting information were those that lack objective and convincing supporting evidence but had undecided, possible, or potential utility and efficacy. According to Stahmer, Collings, and Palinkas (2005), the potential promising practices of today, with sound theoretical rational and thorough science, will become the evidenced-based practices of tomorrow.

Roughly, one-third of intervention specialists have reported lack of resources and training related to promising practices implemented within the classroom. An important set of principles to ensure access to curriculum is Universal Design for Learning (Rose & Meyer, 2002). The foundation for Universal Design for Learning includes: (a) representing information in various formats and media, (b) providing several pathways for student expression, and (c) providing numerous avenues to engage student interest and motivation (Rose & Meyer, 2002). As a result, teachers have indicated a serious disconnect between the accepted best practice guidelines and current classroom practices.
that may be identified as ineffective (Boyd, Hall, Hurne, & Odom, 2010). According to Rose and Meyer (2002), only a certain teaching method can be valuable if it is aligned with an individual’s unique learning style. Consequently, the difficulty in the implementation of promising practices is that few teachers receive any formal training in evidence-based practice and behaviorally based methodologies (Baker et al., 2001).

With autism identified as the fastest growing developmental disability, the need for individualized and effective intervention is imperative. Undeniably, groups of informed and educated professionals are successfully identifying and implementing practical strategies and practices. These qualified people have the most knowledge and information regarding individual students and the unique elements of their educational circumstances (Simpson & Myles, 1998). “The dilemma for these professionals is to identify and utilize scientific methods and evidence-based practices” appropriate for all individuals affected with autism (Shavelson & Towne, 2002, p. 141). However, “the solid programs appear to be those that incorporate a variety of objectively verified practices that are designed to address and support the needs of individuals, professionals and families with whom they are linked” (Olley, 1999, p 145).

The educational community is scrambling to identify the most effective interventions for this ever-increasing population (Boutelle, 2008). Professionals and family members must collaborate to make a determination regarding what methods will be most effective based on the child and their learning differences. According to some individuals, intervention and treatment selection is the responsibility of the professionals (Simpson, 2008). However, given as it may be, researchers are working to learn as much
as possible about autism, while teachers deal daily with the intricacies of identifying and troubleshooting the best methods and interventions to reach all students (Simpson, 2008).

**Promising Practice 1: Treatment and Education of Autistic and Communication Handicapped Children. (TEACCH)**

One of the most well-known promising practices established in the 1970s and still used today is the Treatment and Education of Autistic and Communication related Handicapped Children (TEACCH). TEACCH requires a highly structured environment and can be modified to meet the needs of an individual (Schopler, Mesibov & Hearsey, 1995). “The TEACCH approach is also called Structured Teaching. Structured Teaching is based on evidence and observation that individuals with autism share a pattern of neuropsychological deficits and strengths” (Mesibov & Shea, 2010, p. 571). TEACCH is an educational approach based on collaboration between parents and professionals in which parents preside as co-therapists (Schopler et al., 1995). Designed especially for individuals with autism, TEACCH takes into account the disorder’s features and strives to minimize challenges utilizing structured and continuous interventions, environmental adaptations, and alternative augmentative communication (Elia et al., 2009).

TEACCH is broken down into four main components: (a) environmental organization, which refers to the layout or set up of the classroom which best suits the individual; (b) visual schedules, which allows the student to work independently and know exactly the teacher’s expectation related to task completion; (c) work systems, which informs students what and how a task should be done including how much; and (d)
task organization, which provides the student a visual representation of tasks to tackle first, second and so on (Schopler et al., 1995).

Typically, teachers implementing TEAACH have specific areas in the environment pre-constructed so the materials are organized and the students have an appropriate amount of room to complete their assigned tasks. Based on the needs of the student, the activities are set up according to the individuals’ present levels to promote success. Activities may be modified accordingly and the teacher can present modifications to the activities, which may include visual pictures verses written directions if the student displays difficulty completing a task. Boucher and Lewis (1989) confirmed that some children with autism, when presented written directions, made significantly fewer errors versus children given the directions verbally. In addition, the use of visual cues may decrease or alleviate communication difficulties.

**Promising Practice 2: Visual Supports**

Greenspan (2006) acknowledged that individuals with autism demonstrate various levels of comprehension, communication, and language processing, regardless of the individuals severity level. Cohen (1998) stated “children with autism are visual learners rather than hearing/auditory learners and prefer alternative means of communication since this trait possesses as such a deficit for many autism learners” (pp. 26-27). Jaime and Knowlton (2007) pointed out that when children receive support in comprehension and communication, their frustration and inappropriate behaviors typically decrease, which allows more opportunity for learning. As much as visual supports are intended to assist children who are struggling cognitively, visual supports
are “intended to be temporary and should be faded when the student begins to communicate and learn through more conventional means” (Tissot & Evans, 2003, p. 262).

Jaime and Knowlton (2007) defined visual supports as:

Any visually perceived stimuli that assist in comprehending environmental information and demands. We see examples everywhere in real-world community environments: Icons representing women or men (or hens and roosters, for that matter) on public restroom doors, flashing traffic lights, or arrows guiding our direction of movement are illustrative of visual supports. (p. 260)

Visual supports are key elements of physical structure, schedules, instructions for activities, communication, and reminders about expectations and limits. Researchers and clinicians have accepted the importance of visual material for increasing skills of individuals with autism. Pierce and Schreibman (1994) taught youngsters with autism to carry out daily living skills without supervision using picture cues. Bryan and Gast (2000) reported significantly more time on tasks and more correct completion of assigned tasks when visual activity schedules were utilized.

Gagle and Rao (2006) defined visual supports:

Part of everyone’s communication system, provides the opportunity to hold the students’ attention when the surrounding environment can be so distracting and unmanageable to concentrate, visual supports reduce the level of anxiety which one may have since processing language is highly difficult for individuals with autism, visual supports assist in introducing abstract concepts to make them easier to understand, and finally visual supports help the student express themselves especially if they lack the verbal ability or comprehension to communicate effectively with others. (p. 26)

Visual supports also assist individuals in coping with environmental changes, as well as increasing his/her independence with daily routines (Swanson, 2005). In 2005, Hamlin
stated “although there is a specific criterion that defines autism, the individual manifestation is as complicated and multidimensional as the human being itself. There is no one best teaching/learning method for all!” (p. 26).

One of the most helpful visual supports in the classroom for an individual with autism is a visual schedule (Janzen, 1996). Visual schedules provide predictability throughout the day, especially to individuals who have great difficulty when transitioning between activities or unknown events that may occur. Due to the anticipation of these events, the individual is likely to engage in challenging behavior. During heightened periods of transition, the child is typically unable to process language or comprehend spoken word. Therefore, presenting visual schedules or cue cards provides an opportunity to eliminate verbal directives and unnecessary prompting.

However, Hodgdon (2000) believed that more visual directives within the classroom, do not guarantee that the student will necessarily comprehend the information. Dalrymple (1989) reinforced the use of visual supports in that individuals with autism have problems understanding social communication cues such as gestures, facial expression, body language, and voice tone and therefore "as a rule of thumb, the more people with autism can be provided with visual cues, the better they will understand what they are supposed to do” (p. 5).

For nonreaders and individuals who are nonverbal, visuals such as pictorial icons provide numerous advantages over written words, sign language, and verbal cues (Jaime & Knowlton, 2007). Pictures are universal and generalized across all settings and people, which assist in decreasing anxiety provoked by transitions or unfamiliarity perceived by
the individual. Additional visual approaches targeting behavior reduction strategies are also referred to as empowerment strategies, which include token boards, rating scale checklists, and choice boards (Jaime & Knowlton, 2007). The use of choice boards empowers children to take part in activities at school, community, and in the home (Savner, 1999). Based on the individual’s ability, engaging in activities outside the home in an unfamiliar environment may provoke or contribute to behavior opposed to providing simple pictures with choices to select and provide ease.

The two most efficient ways to identify motivators for an individual with autism is to observe the individual engaged in non-contingent play and object manipulation, and ask others who know the individual well (parents or para-educators) what the child enjoys most. By combining the observation of the individual in various environments, and asking others to contribute their input will eliminate mundane reinforcers (Jaime & Knowlton, 2007). If the reinforcer is truly powerful, the individual’s behavior will remain under control and positive. One particular tool that can be used to motivate and provide opportunities for the student to earn reinforcers, if used correctly, is a token board. A token board serves as a visual representation of a specified number of tokens conditional to their behavior. An individual can exchange tokens earned for a predetermined reinforcer, hence increasing desirable behavior (Jaime & Knowlton, 2007).

To assist individuals with autism monitor his/her emotions, behavior, and effects on the immediate environment, Buron and Curtis (2003) developed a 5-point self-monitoring behavior scale. The scale includes a wide range of social concepts, from voice volume to anxiety level. Periodically, the student is instructed to refer to the 5-point scale.
and make changes when necessary based on their behavior. The scale also encourages the individuals to advocate for themselves based on their behavior. As an empowerment strategy, the scale enhances communication for an individual with autism in a number of ways to include pairing visual cues (visual strategy) such as facial drawings, photos of the individual, or other illustrations that could help them identify their present position on the scale (Jaime & Knowlton, 2007).

**Promising Practice 3: Social Stories**

Social stories are designed to positively influence student behavior by providing information related to a social context in the form of a short story often accompanied by visual supports (Gray, 1998). Social stories are valuable in several ways, to include attracting and holding an individual’s attention, enabling the student to focus on the message along with reducing anxiety, and delineate abstract concepts into concrete ideas for comprehension purposes (Gagie & Rao, 2006). Social stories are most effective when based on the individual’s comprehension and vocabulary level (Gray, 2004). Typically, a social story will utilize short, descriptive sentences along with pictures, which can assist the child if reading comprehension is challenging for them. Educators may also introduce a social story as a preventative intervention to a student engaging in challenging behavior specific to a certain situation such as a transition.

Research extensively supports social stories as a means of reducing the occurrence of challenging behavior (Kokina & Kern, 2010). The APA (2000) supports the notion that social stories are used for consistency and predictability. Furthermore, social stories “include elements of several well-established interventions for students with
autism, such as priming or introducing the individual to activities in analogue situations just prior to the actual situations” (Koegel, Koegel, Frea, & Green-Hopkins, 2003, p. 823).

For example, an individual may demonstrate behavior such as dropping to the ground and lying prone when they hear the song, “Happy Birthday.” Since dropping to the floor is a socially unacceptable behavior, the teacher can prepare them by either reading the social story to him/her or have the student read the story independently prior to joining another birthday engagement. A social story illustrating appropriate behavior during the Birthday song may appear as the following: Page 1: Everyone has a birthday; Page 2: During a birthday party, people sing the birthday song; Page 3: I can ask to leave the room if I don’t want to sing or hear the song; Page 4: If I don’t ask to leave, I need to sit quiet so I can have a piece of cake.

Often times, consistency and repetition of a social story prepares the individual for an upcoming situation, which in turn will reduce the individual’s anxiety and lead to a more successful experience (Gray, 2004). Social stories can also assist in completing daily routines such as self-help skills (Hagiwara & Myles, 1999). Graetz, Mastropieri, and Scruggs (2009) pointed out:

A social story can function not only as a reminder to complete specific tasks but also provide reasons and potential consequences that individuals with autism would otherwise not be able to identify independently. By personalizing a social situation with pictures, the social story enhances the concreteness and meaningfulness sufficiently to enhance understanding of appropriate social behavior. (p. 101)

Due to the variability of services required by an individual with special needs, identifying and selecting appropriate educational interventions is complex (Brantlinger et al., 2005).
According to Guralnick (1999), researchers cannot just address a simple question whether an intervention is effective or not. The researcher must be able to specify for whom the practice is effective and in the context. According to the United States Department of Education (2003), interventions should not be selected based on beliefs and assumptions but rather on empirical evidence such as Evidenced-Based Practice. Evidence-Based Practice in Psychology (EBPP), defined as “the integration of the best available research and clinical expertise within the context of patient characteristics, culture, values, and preferences” (APA, 2006, p. 273) should include a wide range of ABA methodologies to realize broad and durable behavior change in this population (Longenecker, Mace, Perry, & Steege, 2007).

**Characteristics of Intervention Specialists**

With an increase in the rate of individuals diagnosed with developmental disabilities, the demands of educating these individuals will continue to increase over time (Cox, 2001). Therefore, defining characteristics of effective teachers is important based on the impact that they may have on the achievements of their students. According to Fenlon (2008), an intervention specialist with knowledge and experience teaching individuals with significant disabilities can be the difference between minimal and substantial learning. Hopkins and Stem (1995) proposed “commitment, love of children, mastery of subject didactics and multiple models of teaching, the ability to collaborate with other teachers, and a capacity for reflection” were key characteristics of high quality educators (p. 53). Stronge (2007) suggested that effective teachers encompass similar
idealistic, analytical, dutiful, competent, and reflective behaviors both in and out of the
classroom.

Identifying the core characteristics of qualified teacher candidates who are committed to their work and are considered effective employees is critical; however, specific research and literature identifying the qualities of intervention specialists is lacking. Stough and Palmer (2003) stated that the complex role of the intervention specialist makes the determination of those desired qualities difficult to ascertain. According to Sapir and Wilson (2001), the most critical characteristics associated with teachers in the field of special education include insight, empathy, adaptability, organization, joy of learning, grades, test scores, a positive attitude, and personal reasons which may include a family member afflicted with a developmental disability.

Through the perspective of Mowday, Porter, and Steers (1982), commitment is another highly valued attribute, which has also received a great deal of attention. The outcome of commitment is clear; committed people are most likely to remain with the organization and work toward organizational goals (Billingsly & Cross, 1992). As a result, individuals with autism along with all other children will be the benefactors of committed teachers.

Berliner (1984) depicted four factors particularly important for effective teachers when creating a classroom culture: (a) communication related to academic expectations, (b) a safe, orderly, and academically focused classroom, (c) consistent and fair routines for managing challenging behavior, and (d) maintenance of cooperative learning
environments. Of the four factors Berliner (1994) focused on, communication of expectations is the most vital.

Communication provides existing teachers and administrators opportunity to assist the candidate in designing and creating a classroom climate to produce markedly different outcomes in individuals with autism. Likewise, Palmer and Stough (2003) believed that intervention specialists require an extensive knowledge base of each student’s prior knowledge, preferences, behavioral patterns, learning abilities, emotionality, and diagnostic categories. As a result, the classroom activities structured by the teacher will be adaptable and personalized to meet individual needs.

In 2010, Beutel et al. conducted an in-depth literature meta-review of studies that identified variables related to effective and ineffective teachers and used interview questions as part of the employment process as a research method. The results of the review concluded that solid interview questions were critical. Thus, the most pronounced area identifying the most effective teachers was the knowledge of professional practice. A description of the knowledge of professional practice includes questions focused on the candidate’s understanding of special education processes and federal and state laws outlining the provision of special education services (Beutel et al., 2010, p. 92). The employment interview described by Beutel et al. (2010) possesses reliability and validity, but it should only be one piece of information upon which employment decisions are made. Relying solely on the interview protocol tested in this research design can significantly deter other critical information when considering an employee.
Brophy and Good (1984) conducted a study in which they systematically divided effective teacher characteristics into three clusters: (a) teacher’s knowledge of the student, (b) teacher’s knowledge of the academic content, and (c) pedagogic knowledge. The first cluster focused on the teacher’s knowledge of the student; in other words, does the teacher truly understand his/her students’ learning curve, experiences, strengths and weaknesses, to customize the individual’s curriculum to match his/her developmental level and interests? “Teachers who have an understanding of these issues tend to make more effective curricular and instructional choices that are more appropriate for the individual child” (Beutel et al., 2010, p. 86).

The second cluster in the study designed by Brophy et al. (1984) illustrated effective teacher’s fluency in the content area.

Teachers with sound content knowledge possess insight about what is important for students to learn, the best sequence in which to order the presentations, activities that are appropriate for the content, collateral enrichment activities, transfer of learning opportunities to other subject fields, and the depth in which the content should be covered. (Beutel, et al., 2010, pg. 86)

This is a critical piece, because not only does content knowledge dictate what is taught, but also how the teacher conveys the content to their students on an individualized level. Teachers with specialized content knowledge have insight about what is important for students to learn, the order in which to present the content and activities to reinforce the content and application of learning opportunities to other content areas. Effective teachers possess the ability to deliver academic content in a skillful and functional manner for meaningful and effective student learning.
The third and final cluster of behavior that Brophy et al. (1984) examined which delineated effective from ineffective teachers was pedagogic knowledge. Pedagogic knowledge is divided into five domains to include: (a) planning, (b) organizing and developing instruction, (c) delivery of instruction, (d) establishing a positive classroom climate, and (e) assessment. Based upon research finalized by Beutel et al. (2010), “the essential components of the special education teacher’s job were identified from the existing literature, recent studies, legal mandates, state certification requirements, and recommendations from national associations” (p. 87). Pedagogical knowledge significantly aligns with the quality of the interactions between the instructor and students, which can consistently be linked to effective goals as well as academic achievement (Berliner, 1984).

Stough and Palmer (2003) also conducted a study contributing to the research literature illustrating effective teacher characteristics. The study consisted of observing, interviewing, and videotaping 19 intervention specialists across five different school districts, with the overall target of determining what constituted an expert intervention specialist. The participants were selected by their supervisors and administrators based on their ability level and expertise in special education. The results indicated that knowledge of educational practice and student characteristics provided the most noteworthy information. Student characteristics included: (a) accurate assessment of student behavior, (b) attention levels and state of mind; (c) ability and implementation of instructional strategies, (d) behavioral management, and (e) a focus on academic, behavioral, and emotional outcomes for individuals with disabilities were key skills and
characteristics of the expert educator. Mitchell and Arnold (2004) pointed out “the importance of behavioral management skills at the classroom and individual level and understanding of the psychological and developmental levels of their students is critical” (p. 89). Beutel et al. (2010) elaborated the need for special education teachers to be able to manipulate numerous pieces of equipment necessary for students, and accessibility to modify curriculum to meet individual student needs.

Contributing to the research regarding teacher characteristics, Thompson, Greer, and Greer (2004) identified that when students were questioned regarding their favorite teachers, personal characteristics were highly valued verses the type of teacher they were. “Those twelve characteristics connect to the theme of caring for students, both academically and personally and strengthen recent indicators for highly qualified teachers” (p. 1). Cruickshank, Jenkins, and Metcalf (2003) defined effective teaching:

Most people would agree that good teachers are caring, supportive, concerned about the welfare of students, knowledgeable about their subject matter, able to get along with parents . . . and genuinely excited about the work that they do. . . . Effective teachers are able to help students learn. (p. 329)

Wayne and Youngs (2003) also studied teacher quality in their research analysis that examined the characteristics of effective teachers and their link to student effectiveness. They investigated ratings from several undergraduate institutions for educators to include: (a) test scores, (b) degrees and coursework, and (c) certification status. They concluded that students learn more from teachers encompassed with certain characteristics (Thompson, Greer, & Greer, 2004, p. 2). The data collected were summarized into 12 common characteristics that students conceptualized as good teaching.
Thompson et al. (2004) stated, “The twelve personal characteristics of effective teachers based on students recalled over and over revolve around an encompassing theme of caring. All twelve characteristics in some way epitomize this essential human trait” (p. 7). The characteristics included fairness, positive attitude, preparedness, personal touch sense of humor, creativity, willingness to admit mistakes, forgiving, respect, high expectations, compassion, and sense of belonging. Most individuals would agree that good teachers are caring, supportive regarding the welfare of students, and informative about content matter. Stronge (2007) commented, “the effective teacher cares deeply, recognizes complexity, communicates clearly, and serves conscientiously” (p. 100). Whitaker (2004) described the following interaction with an effective teacher:

I knew a teacher who taught fifth grade for thirty-eight years. She was absolutely phenomenal—the teacher you wish your own children, grandchildren, nieces, and nephews could have. Her spark and energy never gave out. One day I asked her how she managed to stay inspired. She replied, “This is my 38th year of teaching fifth grade, but for these students, it’s the first time around.” (p. 6)

A seasoned professional or new to the teaching profession, the goal of an educator should focus on ensuring all individuals with a disability have a positive school experience as well as a successful one.

**Personnel Selection Process**

“The 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA 97) reconfirms our nation’s commitment to provide children and youth with disabilities a free, appropriate public education in the least restrictive environment” (Ax, Conderman, & Stephens, 2001). Prior to IDEA, an individual affected with a disability had virtually little to no modifications to assist their needs. Procedural safeguards were
also instituted in the IDEA 97, which required parental participation in designing a child's IEP. “There is an urgent need to prepare additional special and general education teachers to teach children with disabilities” (Williams 1990, p. 66). With the implementation of the procedural safeguards, families had an opportunity for their voice to be heard regarding the child’s educational needs. Because of legislative mandates such as IDEA 97, millions of individuals with disabilities have benefited educational over the past several years (Ax et al., 2001).

Berliner (1984) depicted four factors particularly important for effective teachers to possess when creating a classroom culture: (a) communication related to academic expectations, (b) a safe, orderly, and academically focused classroom, (c) consistent and fair routines for managing challenging behavior, and (d) maintenance of cooperative learning environments. When evaluating the hiring process of teachers, there were several mechanisms related to desirable employment outcomes. For example, assessing the candidates prior experience, previous cultural environment, current pay grade, and personal values matched to the organization or school district values.

According to Liu and Johnson (2006), “a good fit of skills and knowledge can help teachers become more effective in their teaching assignment. Further, when positions match hiring administrator’s expectations, teachers are likely to be more satisfied in the job” (p. 42). Rutledge, Harris, Thompson, and Ingle (2008) concluded that principals “seek both professional and personal characteristics that match those of the teachers already present at the school” (p. 238). With this said, an effective personnel selection process can also reduce the time to hire the proper candidate.
According to Clement (2007), many school districts lack a structured and systematic means for identifying certified teachers. The onsite interview is integral to the hiring practice, and by improving the hiring process, districts can improve teacher selection as a means of attracting and keeping highly qualified teachers (Clement, 2007). Ingersoll (2003) concluded, “data suggest that school staffing problems result from a revolving-door syndrome: large numbers of teachers departing from teaching for reasons other than retirement” (p. 150). Research from the Project on the Next Generation of Teachers from Harvard’s Graduate School of Education “indicates that the hiring process affects a new teacher’s likelihood of being satisfied with his or her position and remaining in teaching” (Johnson, Berg, & Donaldson, 2005, p. 28).

Due to the increasing diagnostic rates of autism, there is a critical shortage of personnel to educate these individuals. Because of these shortcomings, service providers are often limited in the autism education communities, organizations, and institutions (Shook, Ala’l-Rosales, & Glenn, 2002). Consequently, as more and more individuals are taught in least restrictive environments, additional intervention specialists are required (Williams, 1990). Unfortunately, increasing demands on intervention specialists has also increased attrition rates (Cox, 2001).

Additional implications faced by school administrators when identifying intervention specialists include (a) an increase in special education teachers accepting jobs in general education, (b) an increase in the number of special education positions, and (c) a decrease in the number of licensed special educators graduating from teacher preparation programs (Boe, Cook, Kaufman, & Danielson, 1996). As Ax et al. (2001)
indicated, once an intervention specialist obtains a teaching position, “recruitment does not end when the teacher signs a contract” (p. 75). They highly suggest, “mentoring programs, ongoing new faculty orientations, meaningful professional development, wise resource allocation, and an inclusive school culture to increase retention of excellent teachers” (p. 75).

**Interview Process**

The selection of educators is one of the most important tasks a school administrator engages in (Applegate, 1987; Caldwell, 1993). Historically, no other single activity is as critical to operating an efficient and effective school system (Cohen & Gump, 1984). Errors such as non-specific interview questions clearly identifying the candidate’s professionalism and behavior management skills with students made in the selection process have far-reaching concern for students, families, school district personnel, and the functioning of the school district as a whole if not conducted properly (Beutel et al., 2010). According to school administrators, 85% regard the employment interview process as a fundamental factor in the selection of teachers (Vornberg & Liles, 1983).

However, only a handful of research has been conducted in relation to the interview process. Over a period of five decades, nine notable published reviews of the general literature in relation to the interview process have been noted (Arvey & Campion, 1982; Eder & Buckley, 1988; Hakel, 1989; Harris, 1989; Mayfield, 1964; Schmitt, 1976; Ulrich & Trumbo, 1965; Wagner, 1949; Webster, 1982). The synopsis of these research designs conducted thus far has concluded that the interview process is a valid selection
tool to identify quality candidates (Conway, Jako, & Goodman, 1995; Cronshaw & Weisner, 1989; McDaniel, Whetzel, Schmidt, & Maurer, 1994).

While the employment interview is predisposed and validated as a successful administrative tool in school districts, research falls short in identifying and utilizing commercially available instruments designed specifically when hiring Intervention Specialists (Beutel et al., 2010). According to Beutel et al. (2010), the same interview instruments utilized for regular education teachers resemble identical questions and spare no difference from those utilized with intervention specialist in spite of the various differences in job duties and responsibilities.

The differences in job roles between general and intervention specialist make it inappropriate to utilize the same interview tools in gauging the skill levels of both educators. “Effective special education teachers process information about students with disabilities differently than do general education teachers and address varying student needs across a wide range of learning environments” (Stough & Palmer, 2003, p. 206). Based on current research or lack thereof, the need for a specific employment interview tool to assist school personnel in selecting quality intervention specialists is clear.

Beutel et al. (2010) identified the need to strengthen the hiring process for intervention specialists and create an interview protocol. Beutel et al accomplished this by identifying five basic themes: (a) knowledge of student which involves the student’s interaction with family and society and identity as a learner; (b) knowledge of academic content which refers to the teachers being able to apply their knowledge of the students’ interests and abilities; (c) knowledge of instruction emphasizing their ability to plan and
organize, adhere to time management, identify the students’ comprehension level, develop meaningful transitions for the student, and monitor and assess student progress; (d) knowledge of professional practice in the way of IEP development, professional growth, and overall student rapport; and (e) knowledge of collaboration skill enhancing student language and working with families, administration, and colleagues.

Beutel et al. (2010) achieved two goals in their research design to include the development of a reliable employment interview instrument, specifically designed for intervention specialists possessing good validity. The second goal accomplished included data supporting building principals and other personnel often charged with the responsibility of conducting the initial employment interview and having as much success or better then trained staff. Berliner (1984) rationally stated, “the communication of expectations does not just create a classroom climate. The expectations of teachers and administrators can permeate a school, creating a total climate and producing markedly different outcomes” (p. 87). The employment interview described in this paper “seems to possess reliability and validity but it should, however, be only one piece of information upon which employment decisions are made” (Beutel et al., 2010, p. 96).

**Teacher Selection Processes**

To identify teachers who are highly effective, Peterson (2002) recommended that districts adopt a set of guiding principles for the hiring process. The interview team can eliminate inappropriate candidates by asking the right questions based on what they are seeking for in educators. Clement (2007) said, “The days of asking hypothetical questions and the standard ‘tell me about yourself’ are over. To fill today’s classrooms with
competent and qualified teachers; administrators must systematize and professionalize the teacher selection interview” (p. 47). The interview questions must filter out the wrong candidates and dig deep into candidates who represent the highest quality. Ramey (2006) indicated that asking the proper questions can distinguish the good candidate from the great. He also stated that there are three elements that top quality candidate’s posses: (a) the responses to the questions that are asked and not avoiding directly answering the questions, (b) the candidate provides example based on experience, and (c) the candidate provides support in his/her responses that they have done this or can do it in the school. Not only is asking the right question vital, but also seeking the right response. Tooms and Crowe (2004) reasoned that “thoughtful questions provide candidates ways to demonstrate their strengths, admit their weaknesses, and reveal their beliefs about curriculum, classroom discipline, school culture, collegiality, and commitment to the profession” (p. 52).

Another method used to interview intervention specialist candidates is Behavior-Based Interviewing (BBI). BBI represents the opposite of hiring someone based on a gut feeling, assumption, or intuition. BBI is “rooted in the belief that past behavior is the strongest indicator of future performance, BBI asks specific questions to assess a candidate’s knowledge, skills, and experience. It offers a clear sense of suitability for a position” (Clement, 2007). Green (1996) wrote that BBI is the “most objective, systematic, consistent, and unbiased method available for filling jobs with the best people” (p. 49).
In Clement’s (2007) research, he recognized two types of behavior-based interviewing: PAR (problem, action, and result) and STAR (situation, task, action, result). The categories include (a) curriculum, (b) planning, (c) classroom management and discipline, (d) assessment, (e) meeting individual students’ needs, (f) communication with parents and others, and (g) professional growth. Clement, Kistner, and Moran (2005) indicated that one strategy made available by PAR involves “asking candidates to describe problems for which they were responsible, actions they took to address the problems and the results of their actions” (p. 59). In reference to STAR, Clement et al. indicated that interviewers used this strategy to ask candidates about previous experiences and to explain how they handled themselves in these situations.

Due to the importance of the interview, many researchers have investigated the components of this process, specifically interview questions (Beutel et al., 2010). In order to select highly effective teachers, much thought must be placed on the questions presented to the candidates. These questions must reach the root of the candidates’ purpose, knowledge, and philosophy. Tooms and Crowe (2004) reasoned that “thoughtful questions provide candidates ways to demonstrate their strengths, admit their weaknesses, and reveal their beliefs about curriculum, classroom discipline, school culture, collegiality, and commitment to the profession” (p. 53). Without a doubt, operating a proficient and effective school is the result of hiring the right people who can make the difference for children.
Conclusion

Developing a well-established interview process can add to the overall validity of the candidate selection process and in turn provide school districts a higher probability of placing effective teachers into every classroom. Hynes et al. (2012) identified the significance for administrators identifying educator personality characteristics, which included: (a) working as a team member, (b) passion for teaching, (c) a positive attitude, and (d) a focus on student-centered teaching. Professionally, an educator must acclimate to numerous changes when accepting a new position and these transitions can include: (a) professional discourse in an unfamiliar setting, (b) communication with various professionals, (c) assisting and understanding families of their students, and (d) overall befriending colleagues who may either assist them or choose to let them struggle. Therefore, much thought and preparation is required when selecting new teachers.

With autism on the rise and limited advancements in treating and clearly understanding individuals on the autism spectrum, autism remains a mystery (Frith, 2003). “Thus, in spite of crucial and meaningful gains in information about autism and procedures and intervention strategies that benefit individuals with autism, persons with autism-related disorders remain an enigmatic group” (Simpson, 2005, p. 141). As a lifelong disorder, autism has various interventions, strategies, and controversial treatments, which confuse and alter the minds of the families who live with the effects of this disorder every minute of the day.

In addition, educators face the lack of evidence-based and scientifically supported treatments aside from ABA (Simpson & Myles, 1998). Nonetheless, evidence that
unrestricted use of and reliance on these interventions have had detrimental effects in the field of autism. As previously stated in Chapter I, “Good teaching cannot be reduced to technique: good teaching comes from the identity and integrity of the teacher” (Palmer, 2007, p. 9). Good teaching does revolves around the teacher; however, it is also about understanding and utilizing evidenced-based treatments so data can be analyzed and teaching altered accordingly.

Principals believe “the most important professional characteristics of teacher candidates were teacher certification and classroom management skills and the most important personal characteristics were honesty and dedication” (Hynes et al., 2012, p. 53). The ultimate goal for any administrator hiring an educator to work with the special needs population has multiple factors to consider. Over the years, educational researchers have investigated many facets considered to affect student learning and at the heart, lie quality teachers. As a result, the truth remains that the teacher, the right teacher, does make a difference (Wright, Horn & Sanders, 1997).
CHAPTER III
METHODOLOGY

Introduction

The intent of this study, as a qualitative design, was to identify the characteristics of successful Classroom Behavior Therapists (CBTs) by analyzing characteristics of CBTs known to be effective in the classroom and who have accumulated work experience (Merriam, 2009). Simply put, this study sought to uncover what qualities a hiring administrator should seek in prospective employees that will result in a successful CBT. The research question for this study was:

1. What are the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

   1a. What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

   1b. What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?
Purpose of Study

The purpose of this study was to examine the personal and/or professional characteristics of CBTs who are effective at teaching individuals with autism in a self-contained clinical setting. Specifically, the study sought to identify what characteristics successful CBTs possess. Results of this study should deepen current understanding of what qualities support successful CBTs.

Currently, autism is diagnosed in 1:88 live births (CDC, 2012). To meet the social and academic needs of the population, it is crucial to identify characteristics of CBTs who will be able to educate these individuals successfully. Furthermore, it is critical to use this information when trying to identify exemplary, rather than mediocre, teaching staff (Hynes et al., 2012). The data collected and analyzed for this study supplies the information needed for hiring and then maintaining effective CBTs. This study focused on the personnel selection process used to unearth quality inclusive characteristics, and to evaluate an existing interview instrument currently developed for hiring administrators at The Lerner School. After determining the characteristics representing CBTs who are effective in this setting, the current interview protocol was analyzed to determine what characteristics it privileges in the selection process.

Design of the Study

Qualitative inquiry “is focused on discovery, insight, and understanding from the perspective of those being studied” (Merriam, 1998, p. 1). Its aim is to interpret those understandings to address questions concerned with gaining insight into the meaning-making and experiential dimensions of peoples’ lives (Svensind, 1999). It also seeks to
comprehend the meaning and experience of humans’ lives and social worlds (Fossey, Harvey, McDermott, & Davidson, 2002).

Hiring successful individuals has never been an exact science and administrators are under great pressure to select appropriate candidates. It requires time, effort, resources, experience, and some degree of luck. Putting all these traits together makes for a difficult task (Kersten, 2008). Qualitative research methods were particularly suited to this study since its primary purpose was to identify effective behaviors of teachers as they are displayed in a real world setting. It also provided in-depth information in a structured, solidified, and systematic manner (Merriam, 2009).

**Theoretical Framework**

Maxwell (2005) defined theoretical framework as “the system of concepts, assume options, expectations, beliefs, and theories that supports and informs the research” (p. 33). This study employed a constructivist theoretical framework that is based on the belief that people create meaning by filtering new information through their current knowledge, learning through experience, and subsequent reflection based on that experience (Guba & Lincoln, 1994).

When people encounter something new, they have to reconcile it with previous ideas and experiences, perhaps changing what they believe, or even discarding the new information as irrelevant. To do this, people must ask questions, explore, and assess what they know (Meyer, 2009). The constructivist perspective was suited to this study because the researcher intended to determine how the participants have created (i.e., constructed) their current professional knowledge, learned, and reflected on their experiences
(Schwandt, 1994). The constructivist approach is also compatible with the researcher’s beliefs that human beings develop knowledge and make sense of the world when comparing new experiences with their existing schemata (Appleton & King, 2002).

**Role of the Researcher**

The role of the researcher is explained to the reader to portray how the researcher came to be fascinated in conducting this study. One role for this researcher was her position as a doctoral student completing her dissertation while fulfilling her commitments to a fulltime job working with individuals with autism. The researcher invested a considerable amount of time and effort during the course of the study to her career and was optimistic that the research outcomes would benefit her everyday work.

The researcher’s own professional history reflects thirteen years in the field of autism at the Lerner School. The first three years were spent teaching with the last ten years in various administrative positions. Upon entering a doctoral program in Curriculum and Instruction, the researcher began to examine the personnel selection process at the Lerner School, particularly the characteristics of individuals currently in the role who were successful. The researcher had experienced a change in Directorship and CBT’s were resigning from the Lerner School. As a result, new staff were being heavily recruited.

Based on her hiring experience, the researcher felt identifying the most successful CBT’s, learning from their experiences, and gaining a deeper knowledge of their characteristics would be an invaluable learning opportunity. In addition, the researcher’s long-term goals for the personnel selection process included the following: a.) maintain
successful staff, b.) reduce staff turnover and c.) maintain consistency for the students. Being mindful and aware of bias broadened the researcher’s capacity to construct a better understanding of the phenomena being studied (Hein & Austin, 2001). It is the researcher’s hope that evidence from this study will benefit the Lerner School personnel selection process.

Description of the Setting

Housed in one wing of the Cleveland Clinic Children’s Hospital for Rehabilitation, the Cleveland Clinic Center for Autism is a state-of-the-art facility dedicated to autism treatment, education, and research. It is uniquely integrated within the Cleveland Clinic Healthcare System. The Autism Center opened in 1998. During its first year, it offered limited diagnostic services and a small outreach program, primarily providing consultation and training for parents who were establishing home-based behavioral treatment programs for their children with autism. In 2000, in response to community demand, the program expanded dramatically, with increased specialized diagnostic and treatment services and a full day, non-public chartered school, referred to as the Cleveland Clinic Center for Autism, Lerner School.

Today, the Cleveland Clinic Center for Autism serves over 350 individuals with autism and continues to provide an increasingly comprehensive array of services, including an early intervention and preschool program, speech/language services, extensive consultation services, and workshops for siblings and parents. In addition, the Center also provides a full range of psychological evaluation and treatment services, and a robust research program. The Center’s Advisory Council is comprised of a team of
parents, center staff, and autism experts who create programs based on an educational and behavioral philosophy that focuses on meeting the individual’s needs. Ongoing assessment and scientifically based interventions are used to monitor outcomes. The primary goal for individuals receiving services at the autism center is to increase his or her physical and mental functioning, and thereby achieve independence to the fullest extent possible. All aspects of life are aggressively targeted: behavior, communication and socialization, academic, pre-vocational and vocational skills, leisure and physical activity, adaptive life skills, and transition to adulthood.

The participants in this study were CBTs employed at the Lerner School, a non-public, chartered, all year school program, licensed by the Ohio Department of Education and operated under the auspices of the Cleveland Clinic Center for Autism. The school currently serves 104 individuals who were diagnosed with moderate to intensive autism from the ages of 2 to 22. Approximately, 25% of the total student body is female. Roughly 70% of the individuals are Caucasian, 25% percent is African American; the remaining 5% is Asian. The population of individuals live within an 80 mile radius, and are either privately or publicly transported daily (Cleveland Clinic Center for Autism, 2013).

Individuals are typically referred to the Lerner School in one of three ways. The first referral may be from a pediatric psychologist who has diagnosed the child with autism. Once diagnosed, the psychologist can make a referral to the school program. However, acceptance of that child depends upon the availability of an opening and the
family’s ability to undertake financial obligations, which can amount to $71,000 annually.

A second referral process can be through the child’s residential school district. If the child’s school district is unable to meet his or her needs, it can make the referral and assume all financial obligations for that individual’s education. A third referral process provides families the option of private placement at the Lerner School. These families then assume full responsibility of the educational cost.

All referral processes include an intake, observation of the potential individual, and an overall team decision by staff employed at the Lerner School. Not all children with funding are accepted into the Lerner School. Unlike other specialized school programs, the Lerner School uniquely serves individuals affected with moderate to intensive autism. Therefore, individuals referred to the school program have been unsuccessful in prior educational placements and the Lerner School is deemed as the last resort for the individual to have an opportunity to receive appropriate educational services. One of the core reasons for the individual’s lack of success has resulted from their engagement of challenging behavior and untrained staff who lack the skills to analyze and treat challenging behavior effectively.

Once an individual is referred for services by the school district or the family, an individual is not automatically accepted into the Lerner School. Lerner School Administration reviews each case and communicates the results to the families and districts. The Lerner School uses the following questions as guidelines when considering individuals to receive school services:
1. Does the school have the required staff to student ratio to provide appropriate and effective services both educationally and behaviorally?

2. What is the age of the individual seeking education services?

3. Does the individual meet diagnostic criteria for moderate to intensive autism?

4. Are there comorbid disorders along with autism?

5. Are there other medical complexities?

6. Does the parent/guardian agree with the educational philosophy of Applied Behavior Analysis?

7. What are the safety ramifications regarding behavior management of the individual to themselves, staff, and others?

In addition, based on the individual’s educational and behavioral profile, the Lerner School must have an opening available in the appropriate classroom that will serve the needs of that individual. It is at the discretion of the Lerner School Administration to accept or deny individuals into the program.

**Educational Program**

To ensure individuals receive an intensive and appropriate education, the school provides a highly individualized curriculum. The educational programming is developed and implemented by a variety of staff (see Figure 1). It includes state certified Intervention Specialists, CBTs, and Speech and Language Pathologists. The staff work collaboratively to develop and deliver the most functional and effective education for each individual attending the Lerner School.
As an educational program, the Lerner School emphasizes research-supported intervention based on the philosophy and interventional techniques of Applied Behavior Analysis. With the implementation of Applied Behavior Analysis, adaptive behaviors such as communication and social skills have increased, while decreasing maladaptive behavior such as aggression (DeMyer, Hingtgen, & Jackson, 1981; Newsom & Rincover, 1989; Rutter, 1985). Moreover, behavioral treatment has been continuously refined, as research efforts have improved (Lovaas & Smith, 1988).

The strongest outcome data to date revolve around treatment programs based on the science of applied behavior analysis, particularly those that emphasize early and intensive behavioral intervention, with long-term studies showing maintenance of gains over time (Simeonna, Olley, & Rosenthal, 1987). Evidence indicated that Applied Behavior Analysis has evolved to the point that it can produce significant improvements in the overall functioning of individuals affected with autism (Lovaas, McEachln, & Smith, 1993). Researchers over the last 30 years have proven that many specific impairing symptoms and barriers to learning can be significantly altered through the systematic application of behavioral interventions and behavioral instruction (Simpson et al., 2005).

Primary attention has been given to the decrease or elimination of inappropriate, stereotyped, or maladaptive behaviors that interfere with learning and the increase in appropriate or functional behaviors and skills, particularly in areas of communication, academic, adaptive, and/or vocational skills (Anderson, Maye, & Lord, 2011). Based on clinical observation (Gillberg & Steffenberg, 1987), several research teams estimated that
as many as one-third of children with autism experience a deterioration in functioning for several years, marked by an increase in behavior to include aggression, obsessions, destructiveness, and repetitive behaviors.

The hiring of appropriate staff is essential for an Applied Behavior Analysis program. Potential candidates applying for positions at the Lerner school are required to complete a number of online assessments, which were developed through the Human Resource department at the Cleveland Clinic. If a candidate passes the online assessments, the Human Resource department will filter the appropriate candidates to the hiring Administrator at the Lerner School. At that time, if the Administrator proceeds with the candidate, they will conduct the following: (a.) a phone interview, in which the questions were developed by the researcher, (b.) a one-to-one interview also developed by the researcher, and finally (c.) completion of two written essays.

The one-to-one interview protocol was developed by the researcher to align with the desired CBT characteristic, which were identified by the researcher and her colleagues but with no data to support these characteristics were relevant. In other words, the researcher pre-determined the characteristics which best describe the CBT candidate. The interview tool was developed to fulfill the identified characteristics in hopes of maintaining teaching staff long term. Fortunately, the Center had an established student field experience program, which provided undergraduate students the opportunity to work cohesively with Lerner school staff for a semester. During this experience, the undergraduate students were able to gain knowledge, training, and skills at the Lerner
School, which would eventually lead to potential employment after graduation depending on the student, and their field experience placement evaluation.

In addition, staff are highly encouraged to continue their education and become either a Board Certified Behavior Analyst (BCBA) or a Board Certified Assistant Behavior Analyst Certificate (BCaBA). Obtaining a certification requires an individual to complete five educational courses related to ABA and 1,500 hours of practicum supervised by a certified staff. Many reputable universities currently offer online courses with the following required courses: Applied Behavior Analysis for Special Education 1 & 2, Applied Behavior Analysis for Special Education Extended Principles 1 & 2, and a course on Ethical Considerations for Special Educators. Most individuals obtaining their certification complete the courses within a year, and are then required to pass an exam.

Once an individual is certified as a BCBA or a BCaBA, they can conduct descriptive and systematic behavioral assessments. They can also administer functional assessments, interpret the results, and then determine appropriate interventions to assist the individuals and thus reduce the targeted behavior. Currently, the Lerner School has a total of 105 staff. Ten percent of the staff holding a certification in Applied Behavior Analysis, 10% of the staff holding a certification in Speech and Language Pathology, 50% of staff with a certification in an education domain such as Early Childhood Intervention, and the remainder of the staff do not hold a license since this is not a
specific qualification with entry level positions.

![Diagram of Lerner School staffing structure]

**Figure 1.** Lerner School staffing structure.

**Participant Selection Process**

Patton (2002) argued that “the logic and power of purposeful sampling lies in selecting rich information” (p. 230). A sample is representative when it accurately reflects the population from which it is derived. This study used purposeful sampling because it deliberately identified participants whose professional experience and competencies in their positions enable them to provide information pertinent to answering the research questions.

Furthermore, maximum variation sampling is a form of purposeful sampling in which participants are deliberately chosen because they are as different from one another as possible (Merriam, 2009). When sample sizes are small (less than about 30), maximum
variation samples can be more representative than random samples. This study used a purposeful, non-random maximum variation sampling selection with the goal of gathering rich and meaningful data from which the researcher gained insight about the characteristics of effective teaching staff (Patton, 2002).

Participants

Participants in this study included eight CBTs, six female and two male, split into two groups to include four novice CBTs and four mentor CBTs who were hired and currently maintain a position as a CBT. Each mentor CBT has worked directly with individuals attending the school. In addition, each has (a) completed the consent form for the research study (see Appendix C); (b) earned the highest overall scores on interview protocol utilized when they were hired; (c) were employed as a CBT for at least one year; (d) participated and completed the school’s mentorship program; and (e) received an overall annual evaluation score of Fully Meets. At the onset of his or her employment, each novice CBT (see Figure 2) receives an initial 2-week training program focusing on the key aspects of the position. The core training components include the following domains:

- Policies and procedures implemented at the Lerner School,
- Autism and diagnostic criteria and treatment, specifically the moderate to intensive population,
- Applied Behavior Analysis
- Role play sessions to practice components of Applied Behavior Analysis,
- Data collection, graphing, and troubleshooting,
• Curriculum development,
• Field observations,
• Professionalism and communication,
• Functional Behavioral Analysis (FBA),
• Physical crisis training,
• Introduction of job coaching, and
• Speech and Language development in individuals with autism.

All novice CBTs participate in a pre/posttest indicating their knowledge prior to and after new staff training. Once the training is completed, novice CBTs are enrolled in a mentorship program called the Peer Professional Program (P3). Once enrolled in the mentorship program, novice CBTs are assigned a mentor for the first 90 days of their new hire period.

The P3 program is led by and supervised by an Educational Coordinator at the Lerner School. The program has been instrumental in supporting novice CBTs at the Lerner School in both clinical and professional development. The program also provides novice CBTs with the opportunity to develop a professional relationship with colleagues, aside from their direct supervisors, who have had extensive experience serving individuals at the Lerner School. In addition, the P3 program has a specified training protocol that requires documentation throughout the 90 day mentorship period and is then returned to the program Coordinator illustrating that the mentor CBT and the novice CBT have completed the program.
Note. To ensure confidentiality, the research participants are referred to with pseudo names.

Figure 2. Research participants and job titles.

**Novice CBTs**

*Sara:* Sara, a White female in her mid-twenties, has been employed at the Lerner School for 1.5 years. She works in the secondary classroom with several individuals between the ages of 15 through 22. Sara obtained her undergraduate degree in Human Services and Clinical Counseling from a public university. Sara is responsible for working with individuals with severe behavior disorders. At the conclusion of her 90-day apprenticeship, she received a Fully Meets based on her performance. Before obtaining a position at the Lerner School, Sara was a full-time undergraduate student at a public University.
Sara lives at home with her parents and commutes to work daily driving over 30 miles one way. She and her parents have supported the Lerner School financially through fundraising events they have organized. Sara is currently working on her master’s degree at a local university with a focus in social work. Sara also participates as an after school respite worker for individuals with autism, specifically adults.

**Kelly:** Kelly, a White female in her late twenties, has been employed at the Lerner School for two years. She works with several individuals in the secondary classroom who are between the ages of 15 through 22. Kelly obtained her undergraduate degree in health sciences with a minor in psychology from a public university.

One of Kelly’s professional responsibilities is to provide on-the-job training and feedback to individuals at the Lerner School working within structured employment environments on a daily basis. At the conclusion of her apprenticeship, Kelly received a Fully Meets based on her performance. Prior to working at the Lerner School, Kelly worked with adults in a nursing care facility.

Kelly is married with no children. At the age of 22, she was diagnosed with breast cancer. After being in remission successfully for six years, she was recently diagnosed and had a double mastectomy. Between surgery, recovery, and medical appointments, Kelly was removed from work for a total of three weeks and was impatient about returning to work to be with the individuals she job coaches. Kelly is currently working on her nursing degree at a local university. Kelly also participates as an after school respite worker for individuals with autism.
Lee: Lee, an African-American male in his mid-twenties, has been employed at the Lerner School for one year. He works with several individuals in the intermediate classroom who are between the ages of 10 and 15. Lee obtained his undergraduate degree in psychology at a private university. At the conclusion of his apprenticeship, he received a Fully Meets based on his performance. Before his employment at the Lerner School, Lee was employed as a summer camp counselor working with individuals 7-12 years old who had Asperger’s syndrome.

As a summer camp counselor, Lee’s daily responsibilities had included teaching social skills, minimizing frustration during communication exchange, and regulating behavior when appropriate. Lee is newly engaged with no children. He is currently working on his master’s degree in behavior analysis through an online university program. Lee also volunteers his time to an outreach program affiliated with the Lerner School for individuals on the high end of the Autism spectrum one day a week. On the weekend, Lee works as a chef at a local diner.

Ellen: Ellen, a White female in her late twenties, has been employed at the Lerner School for 1.5 years. She works with several individuals in the secondary classroom who are between the ages of 15-22. Ellen obtained her undergraduate degree in psychology and a master’s degree in clinical psychology, both from a private university. Before her employment at the clinic, Ellen served as a provider and manager in a group home for adults with disabilities.

Like Kelly, Ellen provides on-the-job training and feedback to individuals attending the Lerner School, working within structured employment environments on a
daily basis. At the conclusion of her apprenticeship, she received a Fully Meets based on her performance. Ellen lives with her husband and was expecting her first child. During the course of this study, Ellen was working as a CBT and then about three-fourths through the data collection process, Ellen applied for another clinical position in a different department and resigned from the Lerner School. Ellen’s desire to apply for a different position was a direct result of her clinical psychology master’s degree and desire to expand her background and knowledge in autism. Subsequently, Ellen is working in a feeding clinic with various disabilities with a solid caseload of individuals with autism.

**Mentor CBTs**

*Mandy:* Mandy, a White female in her early thirties, has been employed at the Lerner School for five years. She works with several individuals in the secondary classroom who are between the ages of 15 through 22. She obtained her undergraduate degree in Psychology from a private university. Mandy provides on-the-job training and feedback to the Lerner School students working within structured employment environments on a daily basis. At the conclusion of her apprenticeship, she received a Fully Meets based on her performance. She has been a mentor for four novice CBTs at the Lerner School.

Before her employment at the clinic, Mandy was employed as a summer camp counselor working with individuals 5-13 years old who had Attention Deficit Hyperactivity Disorder (ADHD). As a summer camp counselor, her daily responsibilities included assisting and guiding camp participants in recreationally-based group therapy activities aimed at improving social skills, problem-solving abilities, and self-esteem with
age-matched peers, and medication management. Mandy lives with her husband. She and her husband support various Lerner School activities, such as chaperoning school dances, organizing 5K runs, and staff picnics during the spring and summer months.

Mandy has recently completed her coursework for her master’s degree in counseling and has taken a leave of absence from the Lerner School to complete an internship required for her degree. As a result, the researcher was unable to observe Mandy for her second field observation. Upon completion of her master’s degree, Mandy plans to work with families experiencing difficulty managing their marriage while caring for their disabled child/children.

_Gabe:_ Gabe, a White female in her mid-twenties, has been employed at the Lerner School for seven years. She works with several individuals in the secondary classroom who are between the ages of 15 through 22. Gabe obtained her undergraduate degree in English education from a public university. One of Gabe’s professional responsibilities is to provide on-the-job training and feedback to individuals attending the Lerner School and working within structured employment environments on a daily basis. At the conclusion of her apprenticeship, Gabe received a Fully Meets based on her performance.

Before her employment at the Lerner School, Gabe worked as a substitute high school English teacher. Gabe has mentored two novice CBTs. Gabe lives at home with her husband and they have vowed not to have children but have dedicated their lives to help individuals with disabilities. The decision not to have children as a young couple is a direct result of her husband’s older sister diagnosed with a mental disorder, and Gabe has
an older sibling with a severe disability as well. Gabe and her husband attend all Lerner School extracurricular activities and volunteer their time effortlessly.

_Ean:_ Ean, a White male in his late twenties, has been employed at the Lerner School for five years. He works with several individuals in the intermediate classroom who are between the ages of 10-15. He obtained his undergraduate degree in psychology from a private university. At the conclusion of his apprenticeship, he received a Fully Meets based on his performance. Before his employment at the Lerner School, Ean was employed as a summer camp counselor working with individuals 5-13 years old who had ADHD.

As a summer camp counselor, his daily responsibilities had included assisting and guiding camp participants in recreationally-based group therapy activities aimed at improving social skills, problem-solving abilities, and self-esteem with age-matched peers, and medication management. Ean has mentored two novice CBTs. Ean is currently working on his master’s degree in behavior analysis through an online university program. About three fourths through the data collection period, Ean applied for a research position at the Lerner School and was hired full time. Ean requested the new position to accent on his hands-on clinical skill development and technology experience.

_Emma:_ Emma, a White female in her early thirties, has been employed at the Lerner School for five years. She works with several individuals in the secondary classroom who are between the ages 15 through 22. Emma obtained her undergraduate degree in English education from a public university. Emma provides on-the-job training and feedback to individuals attending the Lerner School and working within structured
employment environments on a daily basis. Recently, Emma returned to work after maternity leave and remains a wife, mother of two, and works full time at the Lerner School. Emma is also returning to school to obtain her master’s degree in Education. At the conclusion of her apprenticeship, she received a Fully Meets based on her performance. Before her employment at the Lerner School, Emma was a home tutor for individuals with autism. She has mentored two novice CBTs at the Lerner School.

Data Collection

Patton (2002) wrote, “a case study should take the reader into the case situation and experience – a person’s life, a group’s life, or a program’s life” (p. 450). Instruments utilized in qualitative research are few; in fact, the researcher is most commonly considered the primary instrument for data collection, analysis, and interpretation (Paisley & Reeves, 2001). In this study, four major data sources (see Figure 3) were used to gain information related to the research questions: individual interviews with all participants, two focus groups of CBT mentors and novice CBTs, observations, and documents related to the participant’s job interview prior to employment. Approval to collect data was submitted to and approved by The University of Akron Institutional Review Board and the Cleveland Clinic Institutional Review Board (see Appendices A and B). The interviews and observations discussed throughout this section took place over a three-month period, and photocopies of the pre-hire interview protocols and essays were properly stored in locked cabinets to protect the privacy of all participants.
Interviews

Based on the literature, one of the best techniques to utilize when conducting case studies is the interview (Merriam, 1998). Interviewing as a data collection method provides in-depth information from the participants and allows the researcher to gather the best type of data (Merriam, 1998). “The purpose of interviewing, then, is to allow us to enter into the other person’s perspective” (Patton, 2002, pp. 340-341). “Data are nothing more than ordinary bits and pieces of information found in the environment. They can be concrete and measurable” (Merriam, 2009, p. 85). Data-gathering interview techniques are segregated into three categories: structured, unstructured, or semi-structured (Merriam, 2009).

Figure 3. Data collection sources.

In a structured interview, the questions are predetermined, in an oral format, and the sequence of the questions are predetermined (Merriam, 2009). In an unstructured or an informal interview, there are no predetermined questions and typically, this interview
format is utilized to gather information for subsequent interviews (Merriam, 2009). In a semi-structured interview, the wording of the questions can vary and can be more open-ended which can then lead the researcher to explore new ideas on the topic at hand (Merriam, 2009).

For this study, two types of interviews were conducted: individual and focus group interviews. The individual interview conducted in a semi-structured fashion ensured that all subjects were asked exactly the same questions so that a comparison among all participants may generate particular patterns of information and significance. Semi-structured interviews also enabled the interview session itself to be guided by a list of questions and topics that may be explored based on the participant’s responses and without necessarily following the exact wording of the interview questions (Merriam, 2009).

The researcher conducted individual interviews as the first method of data collection for this study. The individual interview provides the opportunity for the researcher and participant(s) to engage in conversation focused on questions related to the research study (deMarrias, 2004). Permission to participate in the study was granted from each participant, along with a signed and authorized consent form (see Appendix C).

The interview protocols were developed by the researcher and consisted of questions related to educating individuals with special needs (see Appendices D and E). According to Cohen and Gump (1984), the core selection process for hiring teachers has been the interview. More than 85% of educational administrators regard the employment interview process as a vital factor in the selection of teachers (Vornberg & Liles, 1983).
During each interview, the researcher probed additional questions as needed. Probing involves an open-ended follow-up question intended to elicit a thoughtful answer. Additionally, it is a way for the interviewer to explore new paths, which may not have been initially considered (Gray, 2004). All interviews took place in a mutually agreed upon location which provided privacy and non-interrupted conversation. Once each interview was complete, it was transcribed within 24 hours.

**Focus Group**

Focus group research is defined as a method of collecting data from more than one individual at a time regarding a specified area of interrogation (Krueger & Casey, 2000). Stewart, Shamdasani, and Rook (2006) defined a focus group as an interview on a topic with a group of individuals who are familiar with a particular topic. Additionally, focus groups have high face validity (Krueger & Casey, 2000).

Focus groups can also create an atmosphere where more responses can take place (Butler, 1996). Furthermore, Vaughn, Schumm, and Sinagub (1996) suggested focus groups can create a safer environment than individual interviews. Focus groups provide a place for participants to interact in such a way that personal issues and problems can potentially be solved (Duggleby, 2005). Consequently, a focus group setting can generate deep and often unanticipated insights among participants who share their own views and hear the perspectives of others.

In this study, there were two focus groups consisting of four participants in each group. One consisted of mentor CBTs, while the second group included the novice CBTs. All focus group participants had participated in individual interviews before the focus
group meeting. The focus groups were led by the researcher and audio taped, conducted at mutually agreed upon dates, time, and place within the timeframe of the study. Audio tapes from all interviews were only accessible to the researcher and transcriber for a specific time.

Once individual and focus group interviews were complete, all data were kept in a secure location to allow for confidentiality of the participants’ responses. The only individuals granted access to the data were the researcher and transcriber. Identification of the participants remain anonymous and the signed consent forms remain separate to eliminate the loss of participant confidentiality.

**Observation**

The third method of data collection includes observation. When conducting research, observation can be a valuable tool when utilized systematically, focused on specific research questions, and when producing trustworthy results (Merriam, 2009). Researchers may use observation as a tool for reasons to include observing particular actions, activities, and other routines which the participant may identify as mundane with no relevant use of data. Additionally, observations can be used to “triangulate emerging findings; that is, they are used in conjunction with interviewing and document analysis to substantiate the findings” (Merriam, 2009, p. 119). The researcher handwrote field notes consisting of highly descriptive information consisting of information directly related to the research questions which were completed after each observation and included a description of the setting, direct quotations, and observer comments. Field note data were
transcribed within 24 hours of each observation to identify patterns across all participants.

During these observations, the researcher fulfilled the role as an observer participant. The researcher observed and engaged intimately with staff, individuals attending the Lerner School, and research participants within the classroom environment to obtain an insider’s identity, while still maintaining a peripheral role (Adler & Adler, 1998). Initially, each participant was observed for a 30-minute segment, but the researcher determined that an additional 30 minutes was necessary. Correspondence to set the observation session between researcher and participants took place by email and in person. The observation template utilized was identical for each observation session, and data gathered from the observations were significant and compared to data from the individual interview process.

Field-based observation provides the researcher the opportunity to witness and record the participant engaging and interacting within his/her natural environment. The goal is that this will provide meaningful data, which may not be obvious or thoroughly conveyed during the individual interview, and the notes are so descriptive that the reader feels that they are present onsite. Field notes are the researchers’ descriptions of what actually happens in the field and are highly descriptive (Merriam, 2009).

During each observation session, the researcher looked to identify the participant’s interactions with the individuals he/she was working with, observe job responsibilities in action, and look for any patterns between the participant’s individual
interview and the individual’s actions during the observation session. Each participant was observed during the a.m. and p.m. to observe various activities.

**Documents**

According to Merriam (2009), documents can provide detail that can capture information prior to the research design through visual, written, digital, or physical material. Documents provide the researcher a broad range of information which can be categorized into primary and secondary sources of data. With the goal of identifying characteristics related to the participants, the researcher reviewed the participants’ employment files that included a pre-employment interview protocol and an essay. The job interview protocol was developed in relation to specific educator characteristics. Although the selection process was not entirely dependent on the pre-hire interview protocol, the outcomes of the protocol were heavily weighed. Miller (2004) suggested that the key to hiring award winning teachers was through identifying their personal qualities. Relative to Miller’s study, identifying the appropriate characteristics of special educators and uncovering these characteristics through highly selective interview questions was the objective of this study.

A second document reviewed and analyzed as an additional data source included two essay questions completed by each participant during the pre-hire process. During the initial hire process, CBT candidates were required to type responses to two essay questions. The essay questions were specifically written to assist in determining if the candidates had strong writing skills, since writing was an important job responsibility for
the position. These documents were critical to assist in recognizing potential patterns of information associated across the participants.

**Data Analysis**

According to Merriam (2009), data analysis is a complex process that involves moving back and forth between concrete data and abstract concepts, between inductive and deductive reasoning, as well as between description and interpretation. The meanings, understandings, or insights discovered through data analysis result from identifying themes or patterns in the data that address the research questions and generate findings about them. Data analysis is the quest for patterns, uncovering of repetitive themes and relationships of the data, and advancement of information as a means of interpreting the data and communicating it to others. Thomas (2003) stated that “the inductive research approach provides a convenient and efficient way of analyzing qualitative data for many research purposes” (p. 9). Furthermore, the inductive approach provides an opportunity for research findings to materialize from the frequent, noteworthy themes entangled in the raw data.

In this study, the goal of data analysis was to identify the personal and professional characteristics of strong CBTs working with the autism population. Data analysis occurred in conjunction with data collection using the constant comparative method (Merriam, 2009). Constant comparison is the heart of the data analysis process. This analytical paradigm seeks to identify emergent patterns or themes within and across data sources. These patterns are organized into incipient categories that can be eliminated or adapted as each new data source is collected and analyzed. The ultimate goal of this
The first step in data analysis was to identify information in each data source that addressed the research questions. Each piece of information was coded; similarly coded items then formed a category. As noted earlier, these initial categories are tentative and can be altered as items are compared. Figure 4 depicts the coding process.

Merriam (2009) explained the coding process as making notes, making comparisons, asking questions, and reviewing notations that would potentially answer the research questions. Next, the researcher placed bits of repetitive information, emerging themes or categories in order to further organize and obtain meaning from the data.
(Marshall & Rossman, 2006). The data coded in this study was revealed by the responses of successful CBTs and the researcher’s interpretation of the data through note taking.

Preliminarily, the characteristics of successful educators identified in the current literature included teamwork, prior years of working with children either in a classroom or another environment, and passion for teaching others (Hanes et al., 2012). Effective communication with families and school authorities, commitment to their job duties and school environment, insight, and empathy of all human beings, regardless of their strengths or weaknesses (Sapir & Wilson, 2001). The researcher also coded additional themes that emerged through the coding process not mentioned in the literature but relevant to the study.

Sifting through the information and analyzing the data, the categories constructed initially were highly inductive, allowing research findings to emerge from the frequent, dominant, or significant themes in the raw data. Then, as the researcher continued to analyze the data, more categories evolved and were condensed, gradually leading the researcher’s thought process to deductive mode (Thomas, 2003). As the data were gathered and analyzed, the researcher continually evaluated the research and compared the data sets to one another to look for new and emerging patterns.

Since the interview protocol attempted to predict those who will be successful CBTs, comparing the data sources with interviews, observations, and documents generated insights pertinent to the research questions. In regards to interviews, initially when the candidates responded to the interview questions, the interviewer rated the responses between the ranges of 0-2. The pre-employment interview protocol was aligned
with particular characteristics sought after for the position. The protocol identified traits to include (a) knowledge, (b) creativity, (c) problem solving/solution oriented, (d) managing change/flexibility, (e) interpersonal skills, (f) preparation/motivation, (g) instruction of student, and (h) openness to supervision/professionalism.

At the conclusion of the interview, the ratings were calculated utilizing a scale that was developed indicating (a) definitely hire, (b) consider hiring, (c) debatable, and (d) do not hire. Although the selection process was not entirely dependent on the interview protocol, the outcomes of the protocol were weighed heavily. Hynes et al. (2011) suggested that “personal qualities of the candidates” were key to the hiring of “award winning” middle school teachers (p. 52).

Participants also completed two written essays directly after the face-to-face job interview that were also rated on a Likert scale ranging 0 to 2. The essays were reflective of job-related scenarios. In summary, data analysis is most significant when data are organized and categorized into interrelated themes in which the researcher can interpret meaning (Merriam, 2009).

**Trustworthiness**

To ensure validity and reliability in qualitative research, examination of trustworthiness is crucial. While establishing good quality studies through reliability and validity in qualitative research, Seale (1999) stated that the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (p. 266). It is imperative that research is trustworthy; therefore, it is necessary to ensure validity and reliability in an ethical manner (Merriam, 2009). To establish trustworthiness
in a study, the researcher must provide an in-depth depiction to demonstrate that the author’s conclusions make sense (Merriam, 2009). A researcher's ability and skill in a qualitative research study means that the reliability is a consequence of the validity (Patton, 2002). Furthermore, the notion of whether the findings are credible is based on the data presented by the researcher (Lincoln & Guba, 1985).

Patton (2002) advocated that the use of triangulation is a solid procedure to establish validity by indicating that it strengthens a study by combining methods. This includes using various data collection sources and multiple investigators. In this particular study, member checking was employed once data were collected and analyzed. Member checking provided the participants an opportunity to review the data themselves and with colleagues and provide additional feedback if necessary (Merriam, 2009). In addition, interviews conducted in this study as a means of gathering data specific to the research questions were completed in focus groups. Therefore, teaching staff had the opportunity to discourse with one another during the focus group interviews and indicate whether the responses were appropriate or not.

Guba and Lincoln (1981) proposed three criteria for evaluating qualitative findings and enhancing trustworthiness. These criteria can be incorporated into a research design and used to assess qualitative findings: (a) credibility is analogous to internal validity; that is, the approximate truth about causal relationships, or the impact of one variable on another; (b) transferability, referring to the degree that findings can be transferred or generalized to other settings, contexts, or populations; and (c)
dependability, which is the researcher accounting for or describing the changing contexts and circumstances that are fundamental to research study.

The participants’ responses in the individual interviews were checked and verified with the focus group responses and observations. With various methods of data collection, the detailed accounts of gathering data employed triangulation. Gall, Gall, and Borg (2003) defined triangulation as a “process of using multiple data-collection methods, data sources, analysts, or theories to check the validity of case study findings” (p. 464). The consistency of data was achieved when the steps of the research were declared through examination of the interview notes, observation, and documents (Campbell, 1996).

If the trustworthiness can be maximized or tested, then the more “credible and defensible the results” will be (Johnson, 1997, p. 283) leading to generalizability. Gernalizability is one of the concepts suggested by Stenbacka (2001) as the structure for doing and documenting high quality qualitative research. Therefore, the quality of research is related to the generalizability of the results and thereby increasing the trustworthiness of the research.

**Limitations of the Study**

A case study presents special features, which supports the rationale for its selection; case studies also present particular limitations in its usage (Merriam, 2009). A significant limitation in this study pertains to the small sample size of participants. Although the selected participants met specified criteria selected by the researcher, the criteria may have also limited the number of participants at the Lerner School who would
be able to participate in this study. Based on the limited number of participants and criteria identified, the generability is limited based on region, population of children, and the center staff who have very specific experience as it pertains to individuals with autism.

Another limitation to this study includes four of the eight participants who initially participated in this study were limited to only 30 minute observation sessions instead of 60 minutes, due to obtaining new employment during the course of this study. Further, it is possible that information or data that could have informed the study was lost due to the cancellation of the second session. An additional limitation was the potential risk factor of bias stemming from the researcher’s perspective as the primary instrument in gathering data. Participants of this study were interviewed and hired by the researcher through the pre-employment process for their current position. The possibility that interpretation of the data were biased is likely, based on the researcher’s previous knowledge and experience with the participants (Guba & Lincoln, 1981).

A thorough review of the literature concluded minimal information illustrating a significant contribution to the researcher’s topic of interest as it relates to special educators. Since literature is limited as it relates to identifying characteristics of special educators, it was the intent of the researcher to develop an interview protocol emphasizing the characteristics identified through this research design.

Furthermore, the participants in this study were not all licensed Intervention Specialists. Rather, they were CBTs, which is a unique title and position for individuals who have specific training in working with the moderate to severe autism population.
One limitation in this study is its generalizability. The limitation lies in the arena that the findings will be generalizable to other educational settings and educators who do not have specialized training in working with the intense autism population described in this study: but with individuals across the autism spectrum and other disabilities in general (Gall et al., 2003).

The final limitation in this study was the limited amount of time the researcher allocated to observe the participants engaging in their daily job responsibilities with the students. Two 30-minute observation sessions were allocated per participant; however, the researcher identified that during the 60-minute observation sessions various events, both controlled and uncontrolled, took place while working with the students which may have affected the outcome of the data.

Summary

As a qualitative case study, the researcher’s intent was to search for meaning and insight in the data in order to produce a highly descriptive conclusion (Merriam, 2009). The research involved qualitative inquiry and a multi-case study research design using eight participants: four novice CBTs and four mentor CBT. Interviews, focus groups, observations, and documents served as sources of data for this study. The researcher used several means of data collection to identify pertinent information to answer the research questions; hence, the validity of this study was established with the researcher utilizing triangulation (Gall et al., 2003). Data were analyzed utilizing the constant comparative method, and results were reported in a narrative format.
CHAPTER IV
RESULTS

The purpose of this study was to examine the personal and professional characteristics of Classroom Behavior Therapists (CBTs) who are successful at working with individuals with moderate to severe autism in a self-contained clinical setting. Specifically, the study sought to determine what successful novice and mentor CBTs identify as significant characteristics of successful CBTs. The qualitative research study (Merriam, 2009) employed a case study design using eight participants. The participants were divided into two groups: four as novice CBTs and four as mentor CBTs (Figure 5). A short description of each participant is provided in Chapter 3.

For this study, data were collected using multiple sources, including one-to-one interviews, focus groups, observations, and documents. Initially, the researcher focused on identifying patterns or themes within each case that then were organized into categories. The development of categories from the raw data that captured key themes and processes important according to the researcher, was the primary method of data analysis (Thomas, 2003). After analysis of both cases independently, a cross-case analysis compared categories that resulted in the generation of findings, which addressed the research questions for this study, which was:

1. What are the personal and professional characteristics of successful classroom
behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1a. What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1b. What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

Figure 5. Research participants and job titles.
The findings presented in this chapter emerged from analysis of the data collected through comparison of the results across both groups. Data were collected from eight participants, four novice and four mentor CBTs. Data included observations, one-to-one interviews, a focus group, and pertinent documents (e.g., initial interview protocols, essays).

The researcher created a case profile for each group. For each profile, she began the data analysis process by reviewing and coding the transcribed interviews by identifying data relevant to the research questions. In looking for themes, the researcher used an a priori coding scheme (Weber, 1990), deliberately seeking evidence of (a) personal efficacy, (b) interactive skills, and (c) professional knowledge. Because she employed the constant comparative method, the researcher was able to analyze the data within each case, while simultaneously noting patterns that were emerging across cases. This enabled her to see different individual and group perspectives of central issues (Patton, 1990).Codes were used to designate specific patterns that emerged from data analysis. Data coding played an important role, because the data could be manipulated with questions to provide the researcher with insights about the research questions (Ryan & Bernard, 2000).

After coding the one-to-one interviews, the transcribed focus group interviews were reviewed and coded. Next, observations were reviewed and coded, along with one-to-one interviews from the participants’ initial job interview at the Lerner School before being hired. Finally, essays written by novice CBTs during the Lerner School hiring process were reviewed and coded.
In this chapter, results of data analysis are presented by research questions. It is important to note that while patterns emerged that were identified as themes and placed into discrete categories, data analysis revealed that overlapping characteristics were embedded in some of the examples of successful characteristics illustrated by both the novice and mentor CBTs. Figure 6 illustrates common themes derived from the findings of the data analysis from each case (i.e., novice and mentor CBTs), which presents supporting examples drawn from the data followed by a cross-case comparison. Based on the findings, three broad categories emerged from data analysis to include: (a) personal efficacy, (b) interactive skills, and (c) professional knowledge.

**Results of Research Question 1a**

RQ1a: What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

**Novice CBT Perceptions**

Novice CBTs identified 10 significant characteristics of successful CBTs. These addressed three broad areas: (a) personal efficacy; (b) interactive skills; and; (c) professional knowledge.

For personal efficacy, six broad patterns emerged: (a) problem solver; (b) time manager; (c) passionate; (d) goal oriented; (e) organized; and (f) eager to gain further education. For interactive skills, two broad patterns emerged: (a) team player, and (b) accepts and provides feedback. For professional knowledge, two broad patterns
emerged: (a) prior experience with children affected with a disability, and (b) ability to implement principles of applied behavior analysis.

<table>
<thead>
<tr>
<th>1. PERSONAL CHARACTERISTICS</th>
<th>NOVICE CBTs</th>
<th>MENTOR CBTs</th>
<th>NOVICE/MENTOR CBTs</th>
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<tr>
<td>1a. PERSONAL EFFICACY</td>
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<tr>
<td>A. Problem Solver</td>
<td>A. Problem Solver</td>
<td>A. Problem Solver</td>
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<tr>
<td>B. Time Manager</td>
<td>B. Passionate</td>
<td>B. Passionate</td>
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<tr>
<td>C. Passionate</td>
<td>C. Perseverance</td>
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<td>D. Goal Oriented</td>
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<td>E. Organized</td>
<td>E. Organized</td>
<td>E. Organized</td>
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<tr>
<td>F. Eager to gain further education</td>
<td>F. Decision maker</td>
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| 1b. INTERACTIVE SKILLS       |             |             |                     |
| A. Team player              | A. Team Player | A. Team Player |
| B. Accepts and provides feedback| B. Accepts and provides feedback| B. Accepts and provides feedback |
| C. Effective communication skills | C. Effective communication skills | C. Effective communication skills |

| 2. PROFESSIONAL KNOWLEDGE   |             |             |                     |
| A. Prior experience with children affected with a disability | A. Prior experience with children affected with a disability | A. Prior experience with children affected with a disability |
| B. Ability to implement principles of applied behavior analysis | B. Ability to implement principles of applied behavior analysis | B. Ability to implement principles of applied behavior analysis |

Figure 6. Matrix of successful CBT characteristics.
**Personal efficacy.** Novice CBTs identified the following as significant characteristics of successful CBTs as it relates to the personal efficacy domain: (a) problem solver; (b) time manager; (c) passionate; (d) goal oriented; (e) organized and; (f) eager to gain further education. Personal efficacy is defined as the belief in one's capabilities to achieve a goal or an outcome and finish the job (Margolis & McCage, 2006). For purposes of this study, personal efficacy was relevant as a core theme because the characteristics depicting CBT’s directly represented personal characteristics, which is not teachable. The characteristics intrinsically motivate the CBT to achieve goals regardless of the outcome with an “I can do it” attitude. The researcher’s experience with the CBT’s on a daily basis provided her the opportunity to witness that educational knowledge alone does not define a successful CBT. Rather, the personal characteristics such as being passionate and goal orientated were heavily weighted as measures of success.

**Problem solver.** All four participants indicated that as they work throughout the school day, they are constantly problem solving. Recalling her experiences, Kelly observed that when dealing with a problem, she considers “not only will this decision potentially affect me, but how will it affect others, did I consider all my options, or should I involve the thoughts and opinions of others” (essay, December 2, 2010). As an example, Kelly pointed out that while working with one of the individuals on physical fitness activities, she found the young man was having difficulty tracking the number of laps he completed daily.
As his frustration escalated, so did his aggressive behavior. Tapping into her problem solving skills, Kelly provided the individual with six ticket stubs and placed a small cup outside the classroom. She told him that “each time you pass the classroom, place a ticket stub inside the cup. Once all your ticket stubs are in the cup, you are done with your laps for the day. I will walk the first lap with you so that you are on track” (field observation, February 6, 2013).

Observational notes revealed that Lee was working with a new student at the Lerner School who displayed non-compliant behavior when requested to engage in a specific activity. Lee said that a plan had been developed and implemented, but had not been successful and the individual and staff were being injured. As a result, Lee resorted to utilizing crisis intervention (field observation, February 11, 2013).

Ellen emphasized her challenges and the need to use problem-solving skills on the spot with very little time to react and/or report to a supervisor for feedback. She referenced an experience in a previous position when she had urgently needed to develop a plan to secure a smooth transition for a young man entering a new group home. Ellen identified the individual as:

A young man in his early twenties who was both blind and had limited communication. In order for the transition to be successful, I met with my staff, and assigned several staff to this individual, had highly reinforcing activities available when the individual arrived to the new group home, developed a draft behavior plan, and had several conversations with the individual’s mother. Overall, the transition was a success but planning and problem solving were essential. (one-to-one interview, March 4, 2011)

Similarly, Sara strongly supported problem solving, as a significant characteristic of successful CBTs. During the focus group, Sara noted the following:
You have to think outside of the box of how can you make this successful for the student, you may try it and that may not have been the right answer and so you keep building different supports and try different angles until the student is able to pick up on it and be successful. I think you know when you look back at your data and it shows you have finally found that thing that works for that individual, I think it is very rewarding. (focus group, February 1, 2013)

**Time manager.** Three out of the four participants reported through various data sources that being a good time manager was a significant characteristic of successful CBTs. For example, Ellen described day-to-day routines at work that were critical to maintaining a healthy home and work life balance. “I do not like to leave any work left incomplete until the next day because one never knows what the next morning will look like and if the students arrive and I am not prepared, it’s going to be a long day for everyone” (one-to-one interview, February 2, 2013). Ellen further explained that she relied on routines, lists, and schedules to organize her time. Likewise, Lee’s response to having proper time management skills as a CBT was, “I am very good at time management. Any free time I get, the first free time that comes available, I do what’s next on my list” (one-to-one interview, January 30, 2013).

Sara emphasized that even though the CBT position is challenging and tiresome, it “meets my demands on time because we are given an open window from 7:30 a.m. to 4:30 p.m.,” and noted that “I am here from the exact starting time until the end of the day” (one-to-one interview, January 21, 2013). Sara commented that she really takes advantage of stretching her day from 7:30 a.m. until 4:30 p.m., unlike some staff who walk into work at 8:00 a.m. and lose a 30-minute period of time. She stated: “I am going to school for my master’s in human services and clinical counseling and I come home
from work and complete my studies, see family, friends, meet deadlines, and feel good about myself that I can get it all in” (one-to-one interview, January 21, 2013).

**Passionate.** During the focus group interview, novice CBTs responded “passion” when asked the question, “If you were interviewing candidates yourselves for a CBT position, what characteristics would you look for?” (focus group, February 1, 2013). However, when asked to define passion, none of the participants could articulate a definition. Kelly was the first to respond:

I had prior experience working with a family and a family member close to me, I guess I already had the passion and knew the familiarity. I have a brother with a disability; I love him a lot obviously, and care for him deeply and am protective and would not want anyone to work with him who does not feel the same way. So, when I started working here I was like you know these kids are students of brothers, sisters of people, daughters and sons and no matter how much behavior they have or if they pinch or punch me, I am still going to provide them the exact passion as if they were a typical student. (focus group, February 2, 2013)

Lee stated that passion “comes from experience because it’s something you have done before and you know you like it. I also think that experience kind of links with passion for the job or at least working with individuals with special needs” (focus group, February 2, 2013).

Sara explained:

We would do anything for our kids whether it is helping them in the classroom academically or strive to meet goals outside the classroom, community, or at their home. If you do not have the passion or that drive or that motivation then you wouldn’t want to come to this job daily, you won’t succeed at the job because you have to have that, almost like above and beyond mentally to get through the day. (focus group, February 2, 2013)
Ellen commented that “I love to work with the students. I love interacting with the students and watching their progress on a daily basis (one-to-one interview, February 5, 2013).

**Goal oriented.** The importance of being goal oriented was noted by all four participants. Kelly said that setting both individual and group goals was the secret to working effectively as a team:

> When an individual’s behavior is out of control, we work together to calm the student down with the least bit of intensive treatment and crisis response. This can only be achieved by working together. I really think that is really the key to why our classroom runs so smoothly. (one-to-one interview, January 21, 2013)

Kelly also mentioned her personal goal of becoming a nurse practitioner, but said that she must become a registered nurse first. Now she is attending nursing school part time while working and once that goal is achieved, she will move to her next goal, which is receiving her master’s degree (one-to-one interview, January 21, 2013).

One of the most significant patterns to emerge was the importance of advanced education as a career goal. All four novice CBTs are currently enrolled in seeking higher education degrees, either by earning a second baccalaureate or a master’s degree. All participants commented that achieving another degree is necessary to further careers and make a difference (focus group, February 1, 2013).

**Organized.** All four participants identified the importance of organization as a significant characteristic of successful CBTs. During field observation, Sara’s organizational skills were evident as she supervised two students who were simultaneously engaged in vocation tasks; one individual was shredding papers and the other was cleaning computers. According to Sara, she had planned for the arrangement
because it provided immediate access to both students in the environment, the necessary materials were easily available, and she was able to maintain an eye on both students for safety precautions (field observation, August 1, 2013). After spending 10 minutes on their tasks, Sara referred both individuals to a visual schedule and instructed them to transition to another activity. After they transitioned back to their seats, Sara directed both individuals to work on academic skills. Sara immediately retrieved the academic materials and began working with the individuals (field observation, August 1, 2013).

Kelly revealed that organization and a clean classroom means that “our classroom is well put together and professional; in addition my materials are always kept together to include work materials, academic materials, as well as the support materials for the individuals we work with” (one-to-one interview, January 21, 2013). Kelly informed the researcher that she spent 80% of her day in the community, since the individuals she taught had a vocation-driven curriculum. As a result, she believed it was essential to have all materials in place so that time was not wasted nor an opportunity for the individuals to engage in challenging behavior (field observation, February 6, 2013).

Lee noted that since his organization skills were efficient, his time management was highly effective, enabling him to accomplish more on a day-to-day basis. Moreover, once he had organized himself Lee was able to delegate activities, manage his time, and take on new responsibility when requested (one-to-one interview, January 30, 2013). Consequently, his organizational skills led to an improvement in his ability to delegate effectively.
Eager to gain further education. As noted earlier, all four participants had returned to school for either a master’s degree or a second baccalaureate degree in a related field. Aside from the importance of acquiring additional formal education, the four participants identified other positive results from their decision eg., motivating others within their work environments to apply for advanced degrees; improving their time management skills (one-to-one interview, January 30, 2013). Lee stated, “I was talking to the classroom staff about how impressed I was with the master’s program I currently attend and two of the six staff members are now enrolled in the same master’s degree program as me” (one-to-one interview, January 30, 2013).

Kelly discussed her desire to attend nursing school part time while she worked full time and battled her relapse with breast cancer. When asked to consider a break from nursing school during her cancer treatment, her response was,

I need to meet the professional and personal goals in my life while maintaining a healthy balance. Furthering my education is not just about reaching my goal, but I also want to be financially stable someday and in order to accomplish this, I need to stay committed to school. (one-to-one interview, January 21, 2013)

Interactive skills. For purposes of this study, the definition used for interactive skills includes any action, communication, or engagement between two colleagues, such as two-way communication (Yourdictionary.com). A team player is a person who puts aside his/her personal goals and beliefs and works well with others, doing his or her part to strive for a common goal without complaint (Ask.com). Novice CBTs describe successful CBTs as (a) team players and those who (b) accept and provide feedback.

Team player. All four participants identified being a team player as a significant characteristic of successful CBTs. During Sara’s field observation, novice CBTs working
together as team players was evident. Sara was responsible for two individuals during the observation session. When she discovered that one of the two individuals attended an out-of-class speech session with the speech language pathologist, Sara immediately notified her coworkers and began assisting with classroom jobs. She also found other individuals to assist as needed. In my observational field notes, I recorded one of the individuals working in the classroom was having difficulty with a vocation task. Sara immediately told her co-worker, I can assist “Tommy” while you keep an eye on my student. Sara commented to the researcher that “all staff are responsible for all the individuals in the classroom regardless if they are assigned to them or not” (field observation, August 1, 2013).

During her one-to-one interview (January 21, 2013), Kelly expressed her understanding of working as a team player as “constantly bouncing ideas off one another because the needs of the students they work with constantly change.” She provided an example of one of her students having difficulty acquiring a math concept and she had run out of ideas. She decided to exchange ideas with CBTs who had previously worked with her student. Kelly’s goal was to gather creative ideas from colleagues who truly understood how this particular student is learning in order to identify a successful teaching technique. Kelly indicated that although it took some time to flesh out a solution, eventually the student was successful.

When asked, “Give me an example of how you have worked on a team,” Sara responded:

I would consider my job, working on a team. I think all of us are working together to you know have a greater whole. I would say I feel like
I work on a team every day of CBTs whether the whole school as a team or even just my individual room as a team. I feel like we work really well together. (one-to-one interview, January 21, 2013)

Ellen’s response to the identical question included the following comment:

I think working as a CBT is always working as a team. I do not think that you are ever alone and I think that’s a great part of this job is having a team to support you and so I think that takes communication on everyone’s part. Respect for one another is always something that I keep in my mind and being supportive of one another and helping each other when you are having a bad day and communicating that ahead of time is also important. You work with many different individuals so it’s just not CBTs in the classroom, you also have teachers, the coordinators, the speech language pathologists, different therapists and you know your advocating for the kids in the community as well as everyone wants to be on the same page. (one-to-one interview, February 5, 2013)

Furthermore, when asked, “What gets you through your work day when you need to be recharged?,” novice CBT focus group participants unanimously responded, “the team.” They indicated that having a good support system to fall back on was critical. Participants shared knowing they can lean on their teammates, maybe go out to dinner after work or just have fun together was important. One participant noted that, “Even at the end of the day when the kids are all gone like, we just like laughing about a situation or something like that, just like bonding over your day with your co-workers can de-stress you so much (focus group, January 27, 2013).

Accepts and provides feedback. The need for CBTs to have the capacity to accept and provide feedback was identified by three out of four participants. Accepting and providing feedback occurred throughout the day and was a critical aspect of the job. Ellen said that she believed the best part of the job was having a team of people to stand by you and provide feedback when necessary for the benefit of the students. Ellen observed that accepting and providing feedback professionally from colleagues is a great example of
being part of a team and it is all part of advocating for the students so everyone can be on the same page (one-to-one interview, February 5, 2013).

Lee pointed out that sometimes he does not feel like he is “on his game” and requests feedback from his colleagues. Lee said he welcomes the feedback because he knows that something needs to change: “Yes, I think asking the question is the best way to find out and receive feedback” (focus group, February 1, 2013).

Sara commented that, “If I do not receive constructive feedback as a relatively new staff, then how will I improve upon my skills?” (one-to-one interview, January 21, 2013). She added:

A CBT position is a two way street to include accepting and providing feedback. Although I have less experience than most of the CBTs in the classroom, I am always engaging with new CBTs rotating throughout the program. So, someone who has been here for only a month will also look to me for guidance and I am definitely comfortable providing them the feedback. (one-to-one interview, January 21, 2013)

**Professional knowledge.** Two broad themes arose in the professional knowledge domain. Successful novice CBTs had (a) prior experience with children affected with a disability, and (b) the ability to implement principles of ABA. For purposes of this study, professional knowledge is defined as the historical, economic, sociological, philosophical, and psychological understandings of education. It includes information regarding learning, diversity, technology, ethics, legal and policy issues, pedagogy, and the responsibilities of teaching (Ask.com). According to Freidson (1994), the concept of professional knowledge has been expanded to include high-level specialist skills, rather than particular fields of knowledge. The term is also used in reference to pedagogical content knowledge (Ask.com).
**Prior experience with children affected with a disability.** During the focus group, four participants reported why prior experience either working or being affiliated with an individual affected with a disability was important. The following responses occurred during the focus group as it pertains to previous work experience with individuals with a disability. Kelly stated,

I think the biggest thing to look for when hiring a CBT is experience. If you don’t have any experience it’s kind of hard to teach how to, you know it’s kind of something like learned and sometimes that might take time. You can teach concepts but not the emotional and you know, attachment that you have to your job to make you want to come to work every day and you know, it’s not motivating if you don’t really care about what you do. (focus group, February 1, 2013)

Ellen replied,

If you have worked with individuals before and had some type of experience with individuals before, you can more easily relate to them and interact appropriately. In addition, if you come to this job with experience like with a family member or someone close to you, you already have the passion and you know the familiarity. (focus group, February 1, 2013)

Lee previously worked as a camp counselor for two summers with individuals with high functioning autism. During his experience, he indicated that he worked with one particular young man who had challenging behavior and had great difficulty expressing his thoughts when frustrated. As a result, the camp director began instructing Lee on how to assess the behavior, eventually leading to a behavior intervention plan. Lee explained:

My experience in understanding the steps in developing a behavior plan and what goes into the process was invaluable. It has helped me tremendously as a CBT because we deal with behavior all the time, and I immediately begin to think about the steps in assessing behavior and what I learned as a camp counselor and apply it here. (one-to-one interview, March 6, 2014)
Ability to implement principles of applied behavior analysis. All four participants agreed that the ability to use APA was central to the success of a CBT. ABA is a scientifically based treatment, shown to have success with individuals with autism, which uses a system of rewards and consequences to teach new skills and replace undesirable behaviors with desirable behaviors (Cooper et al., 2007).

Based on the unique population of individuals served at the Lerner School, ABA can be implemented differently for one individual compared to another. For example, Lee identified ABA as preparing discrete trial teaching sheets to document an individual’s data which were then used to illustrate the individual’s progress on a daily graph. Lee called use of ABA with his student the difference between a successful student and a mediocre student. He stated:

I think student success is a big one. Doing the best for your students because…if you can see they’re not grasping a new topic or a skill, making sure that you know you can troubleshoot where needed, making sure you are on top, even if they’re not excelling, that you are doing what you can to the best of your ability to make sure that they are being challenged every day. (one-to-one interview, January 30, 2013)

Sara’s field observational data found that she consistently employed the principles or pieces that make up the term ABA throughout each social interaction, teaching trial, and reinforcement session while she worked with the individual she was assigned. For example, when Sara implemented a sight word program, she obtained the individual’s attention, placed the target word in front of him, and then proceeded to say, “Read.” Once the individual had given the correct response, Sara reinforced him and moved onto the next target word. This teaching style continued throughout the 45-minute observation session (field observation, February 13, 2013). Sara’s delivery of ABA is
successful for her students. However, in Kelly’s classroom, the application of ABA is implemented differently, because her students’ learning is not similar to the individuals in Sara’s classroom. Kelly indicated that her students would become bored if they sat in their seats all day, leading to disruptive behavior. In addition, their curriculum requires vocational and daily living skills so they can be prepared for the work environment as adults (one-to-one interview, January 21, 2013).

**Summary of novice CBTs.** Ten themes emerged as significant characteristics of successful CBTs for individuals in a self-contained setting with moderate to intensive Autism. For personal efficacy, participants identified the following characteristics of successful CBTs: (a) problem solver; (b) time manager; (c) passionate; (d) goal oriented; (e) organized; and (f) eager to gain further education. For interactive skills, participants identified the following as significant characteristics of successful novice CBTs: (a) team player; and (b) accepts and provides feedback. For professional knowledge, participants identified the following as significant characteristics of successful CBTs: (a) prior experience with children affected with a disability; and (b) ability to implement principles of applied behavior analysis. Novice CBTs identified that communication is a common threaded throughout several of the characteristics/themes and the core foundation for almost all characteristics of successful CBTs.

**Results of Research Question 1b**

RQ1B: What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?
Mentor CBT Perceptions

Mentor CBTs identified 11 significant characteristics of successful CBTs. These also addressed three broad areas: (a) personal efficacy; (b) interactive skills; and (c) professional knowledge. For personal efficacy, six broad areas emerged: (a) problem solver; (b) passionate; (c) perseverance; (d) goal oriented; (e) organized; and (f) decision maker. For interactive skills, three broad areas emerged: (a) team player; (b) accepts and provides feedback; and (c) effective communication skills. For professional knowledge, two broad areas emerged: (a) prior experience with children affected with a disability; and (b) ability to implement principles of applied behavior analysis.

Personal efficacy. Personal efficacy is defined as the belief in one's capabilities to achieve a goal or an outcome and finish the job (Margolis & McCage, 2006). For purposes of this study, personal efficacy was relevant as a core theme because the characteristics depicting CBT’s directly represented personal characteristics, which is not teachable. The characteristics intrinsically motivate the CBT to achieve goals regardless of the outcome with an “I can do it” attitude. The researcher’s experience with the CBT’s on a daily basis provided her the opportunity to witness that educational knowledge alone does not define a successful CBT. Rather, the personal characteristics such as being passionate and goal orientated were heavily weighted as measures of success.

Mentor CBTs identified the following characteristics significant of successful CBTs within the domain of personal efficacy: (a) problem solver; (b) passionate; (c) perseverance; (d) goal oriented; (e) organized; and (f) decision maker.
Problem solver. Three of the four participants reported that a significant characteristic of successful CBTs is the ability to problem solve. Problem solving is required immediately, and usually under pressure. For example, Gabe was assisting a student with a new vocation task. Based on the individual’s facial expression, it was evident that he was becoming frustrated because the task appeared to be difficult. Rather than end the task altogether, Gabe reduced the number of materials for the individual to complete, drew four boxes on a piece of paper and placed an X in each box as the individual completed the task. Once an X was placed in a box, Gabe highly reinforced the individual and indicated once all boxes have an X, the individual can take a break. The individual slowly began to calm down and eventually earned a break (field observation, February 14, 2013).

Mandy indicated that staff coverage is a daily occurrence that requires creative solutions. On a typical day, one to two CBT call off. Because there are very few substitute CBTs in the program, call offs can affect the quality of educational delivery for the students. Mandy stated:

Almost every morning before the students arrive, I am rearranging schedules, borrowing CBTs from other classrooms, eliminating CBT lunch breaks, and sometimes even scheduling a last minute field day or outing. Administration is aware of the problem and steps are being taken to at least minimize the problem (one-to-one interview, January 30, 2013).

As a mentor, Mandy had been training a staff member who was an employee with the Lerner School for several years, but was new to the current classroom. Reflecting on her training and interaction with this staff member, Mandy realized that she was “getting agitated and becoming very short with her comments and just not being very open to the
training” (one-to-one interview, January 18, 2013). Mandy told her co-worker, “we’re going to stop the training right now, because I can see that you are getting very upset and we can meet after school and have a discussion” (one-to-one interview, January 18, 2013). She felt it was imperative that she identify the best way to interact with her co-worker and decided to allow some time to pass.

At their next meeting, Mandy called attention to and reinforced all the staff member’s positive skills, assuring her that she was not trying to tell her how to do her job. Instead, Mandy was attempting to help the staff member understand the particular individuals in the classroom with whom she had never worked. Mandy felt that “in taking this approach, the CBT was not offended and it all worked out” (one-to-one interview, January 18, 2013).

Emma noted that one of the individuals with whom she was working with was having difficulty completing a task on the computer. Therefore, she requested that he retrieve his curriculum binder and use a specific template for support. After the student retrieved his binder, he sat still staring at the computer screen. Once Emma reviewed the information, she realized that the document had not been updated. As a result, Emma informed staff of the importance of having all materials prepared on a daily basis (field observation, February 14, 2013). In order to solve the problem, Emma conducted a short classroom meeting with the staff and implemented a new daily tracking system for material preparation and staff responsibility.

**Passionate.** All four participants identified feeling passionate about their work as a characteristic of successful CBTs. During the focus group interview, the participants
were asked, “What would you be looking for in your applicants?” Each participant said “passion” (focus group, January 16, 2013). Ean responded:

During an interview session, the subject eventually comes up regarding how the candidate feels about working with children and it’s critical that they want to work with kids because the Lerner School is not where they want to be if they don’t have passion for kids. I think if you’ve got the passion, you will do very well, if you’re uncertain I think you could do well but I think you are better if you have the passion. (focus group, January 16, 2013)

Similarly, Emma stated:

When you sometimes hear stories that the candidate can relate, if you have someone who is really like when they tell their stories of past experiences you can kind of feel that – I know that’s not defining passion but passion comes through with hearing a bit of excitement with the enthusiasm for what they saying as they re-tell past experiences working with children, it’s that experience that shows that spark of why this is the field that they want to work in. (focus group, January 16, 2013)

Like Emma, Gabe indicated that employment at the Lerner School meant hard work and long hours. Because of that, if it was not for the passion she felt on a daily basis, she believed it would be extremely difficult to justify leaving her two young children at home. Emma stated:

When I applied for this position years ago, I never thought that this would really be my calling and I sort of took a leap of faith and it ended up working out better than I could have ever expected. (one-to-one interview, January 11, 2013)

Mandy shared her belief that people who are passionate about individuals with a disability have “a positive emotional response that they give off. They are talking in a positive way, they are smiling, and just recalling the important experiences and the desire to do it again and continue to live and grow” (focus group, January 16, 2013). She stated:

I think its becomes a calling for some people I don’t think necessarily that everyone walks into this job, especially those who are not experienced with
autism and ABA and they really, you know, they really come to have passion for it after they’re exposed to it. (focus group, January 16, 2013)

**Perseverance.** All four participants identified perseverance as a characteristic of successful CBTs. Gabe stated:

Providing follow through with the students, you have to constantly do what you say, say what you will do, and that applies to your interactions with the students, with the staff, with the students’ families and with the administration so the most important thing that you can do is bring integrity to everything that you do in this job. (one-to-one interview, January 11, 2013)

Emma decided to see whether individuals attending the Lerner School could also enroll at a Catholic summer camp where she had previously worked. She approached both the Lerner School’s administration and the summer camp directors. Although it took over a year to receive permission and implement the plan, it finally occurred. Emma expressed her determination and perseverance through the entire process: “I wanted to keep the ball rolling due to the long term affects and potential opportunities for the students” (focus group, January 16, 2013).

Much like Emma, Ean said that he frequently develops Excel spreadsheets for co-workers who make a simple request that he “make this happen, let’s see some numbers.” He said that his response is to “just keep pushing it further – then I end up with a really good product. My hope is that overall it not only helps my co-worker but the Lerner School overall” (focus group, January 16, 2013).

Mandy shared that “it is so rewarding to see students who you’ve worked with for years and years, day after day of perseverance to finally have a positive outcome” (focus group, January 16, 2013). As an example, she cited one of her past students with challenging behavior who is now about to graduate:
He is happy, has a job, and has a significant increase in his quality of life for himself and his family. When I started working with him five and a half years ago, he could not even transition out of one classroom setting. So, in terms of follow through, session after session, day after day, year after year, follow through is so vital for our kids. (focus group, January 16, 2013)

**Goal oriented.** All four participants thought that being goal-oriented was a significant characteristic of successful CBTs. Each noted that furthering their educations and obtaining a master’s degree was an internal aspiration for each of them. Gabe stated:

Yes, I would like to get my Master’s as an Intervention Specialist in the future. At some point, I think that I would also like to definitely get my Board Certified Assistant Behavior Analyst (BCABA) because that’s something that I would really like to do as well in the future. (one-on-one interview, January 11, 2013)

When asked to provide “an example of an important goal that you set for yourself and about your success in reaching it,” Mandy responded, “I was the first family member to finish bettering myself, increasing my future finances, and overall becoming a more educated individual.” She mentioned that although she had set this goal and had relied on her inner drive to achieve it, she had also received significant support from her family.

She added that she “counts on her people pleaser demeanor to motivate herself even more” (initial interview protocol, December 6, 2010). Mandy’s response regarding personal family influence and support as a factor was not considered, but was embedded during initial interviews. Family influence occurred through conversations when mentor CBTs discussed challenging times and required additional personal support.

Gabe responded to the same question by noting the importance of building morale with her co-workers in the classroom setting, especially because of the low staff–to-student ratios at the Lerner School. She shared an example about inadequate staffing. Gabe explained that typically when a CBT resigned for any number of reasons, he or she
was not being replaced. Because the individuals in a particular classroom had severe and behaviorally intensive issues that required adequate staffing, the morale of the remaining CBTs was low. Staff members were concerned that they would experience burnout if they did not receive additional support. Being proactive, Gabe developed reinforcement tactics, goals for the classroom staff, and after-work events, so that they were able to nurture their professional and personal relationships to become a stronger team (initial interview protocol, November 23, 2010).

While discussing his goal-setting behaviors, Ean stated:

Well, with short term goals I just develop a list and knock them off one by one. If I am having a hard time achieving them, I just break them down into smaller components so that I feel like I am getting closer to the global goal rather than feeling I am not making any progress. (one-on-one interview, January 23, 2013)

Ean also described developing long-term goals and noted that he sets benchmarks on his calendar and considers his progress when reviewing the benchmarks. He said,

By referring to my calendar and glancing at this glaring goal of mine, it reminds me of what I need to do and want to do. Therefore, if I have not made a ton of progress, I get a sense of guilt that I am wasting time and need to move on it. (one-to-one interview, January 23, 2013)

Organized. All four participants referred to the importance of being organized. They all noted different management patterns, among them organizing paperwork, teaching materials, developing a checklist of items to complete, or maintaining a clean teaching and work environment (focus group, January 16, 2013).

All mentor CBTs believed creating and developing individualized educational curriculum, which includes daily data sheets and behavior sheets, item checklists, and graphs demanded that the CBT have “incredible” organizational skills. They all noted
that without organization of these critical documents, it is nearly impossible to track the individual’s progress with whom they are responsible to educate. Furthermore, the CBTs relied on daily data sheets to create individualized lessons. Therefore, if the curriculum is not up to date, the individuals will not have the most recent information and progress could potentially be at risk (focus group, January 16, 2013).

Emma pointed out her multiple roles in the classroom and noted that without her ability to organize herself, her work would suffer and most likely so would the progress of the individuals’ she teaches:

It is a trickle effect. If one person does not accomplish their tasks, it can affect the entire classroom or school for that matter. For example, a CBT might be responsible to write a lesson plan on filling out a job application. Although the lesson might be for one particular student, it is definitely a skill, which other individuals could benefit from. Therefore, if that CBT does not organize themselves and complete the task, then not only is there a standstill for one individual but perhaps several. (one-to-one interview, January 25, 2013)

During a field observation, Gabe was placing Valentine’s Day thank you notes into folders being sent home to each of the individuals in the classroom. These notes had been written by Gabe and the other CBTs. After dispersing the notes, Gabe simultaneously straightened the classroom environment (e.g., cleaned a disorganized area) while reinforcing students. She also proceeded to announce to the other CBTs that she was available if they needed her assistance since her students were at a speech session (field observation, February 14, 2013).

**Decision maker.** All four participants identified the ability to make decisions as a significant characteristic of successful CBTs. They noted that decisions are often crafted in the moment with little or no opportunity to think through the process or consequences.
For example, when an individual engages in a challenging behavior, spontaneous decision making is required to protect the individual’s safety and the safety of others. In addition, any decision made may affect an entire classroom of staff and individuals. Moreover, the outcomes of a decision may not always be positive and result in consequences that require additional decision-making skills. Gabe explained:

When transitioning one of the individuals I work with from his transportation vehicle into the school building one morning, he dropped to the ground and began banging his head onto the pavement. The individual to school along with about fifty other students at the same time so there was heavy traffic and a lot of attention from others to include students, parents, transportation drivers, and staff. The individual was aware of his surroundings and knew that no matter what, we would have to draw some attention to him. The decision came down to what type of attention are we going to bring to this individual. Do we transport him into the building while everyone stares, do we allow him to engage in the head hitting behavior, and do we walk him through the behavior? Since safety is the first priority, we decided to transport him into the building straight to class. This entire ordeal is a daily occurrence with several kids throughout the school program and a lot of communication and detail goes into making these types of decisions. However, it is all part of the job. (one-to-one interview, January 11, 2013).

Emma stated that decision-making could “make or break” professional relationships within the classroom environment and sometimes have negative effects with the students. She described a scenario involving a group of her coworkers who were engaged in a conversation after the school day. As soon as one of the co-workers walked out of the room, another co-worker began referring to that individual negatively. Through the discussion, the co-worker engaging in the negative comments asked Emma what feelings she had regarding the colleague about whom was being talked about. Emma said, “I don’t have anything to say and have a ton of work to get done just like I know everyone else has” (one-to-one interview, November 16, 2010). Emma’s quick decision not to participate in the conversation ended the discussion.
Ean noted that he learns best by doing rather than watching. He explained that during his first year of employment as a CBT, he worked with several individuals with challenging behavior. In order to learn how to handle an individual’s behavior, Ean immediately “took control of the situation instead of waiting for a supervisor to jump in. He explained that “while the supervisor mentored me through the behavior, opposed to me just watching, I was actually doing” (focus group, January 16, 2013).

Emma shared that she works with an individual who had hearing difficulties but is fluent in sign language. Emma stated that she needed to be able to communicate with this individual more effectively. Despite the individual’s intelligence, very few staff members were able to communicate effectively with him because of his unique mode of communication. To better communicate with him, Emma decided to review the American Sign Language website quite frequently. She then began spending 15 minutes each afternoon for about two weeks to review sign language with her colleagues. Emma noted that the 15 minutes “flew by” and became a great opportunity for the classroom staff to bond (field observation, February 14, 2013).

Gabe explained that she has initiated the act of taking the high road as a professional in order to bring negativity and frustration to a minimal level. She described a time when her colleagues were working with a group of students in a common area of the school, and one of the family members overheard a staff member make a negative comment about one of the students. As a result, the supervisor of this particular group of staff invited them to attend a group meeting to discuss the parent complaint. Although Gabe had nothing to do with the situation, she initiated the conversation and requested
that everyone in the group suffer the consequences so that all staff are able to learn from the situation and properly apologize to the family. Gabe said that a few staff were not fond of her idea but eventually agreed and moved forward (initial interview protocol, November 23, 2010).

**Interactive skills.** Three themes emerged as significant in the domain of interactive skills: (a) team player, (b) accepts and provides feedback, and (c) effective communication skills.

**Team player.** Mentor CBTs noted that a classroom only flows when everyone reaches agreement and communicates consistently. They observed, for example, that when an individual’s challenging behavior becomes unsafe, more than one staff member typically needs to be involved. For this reason, all staff members need to work together. They are needed either to assist with altering the behavior or with protecting the other individuals in the classroom. Moreover, during times of heightened behavioral challenges, CBTs do not have much time to communicate, so staff members need to respond quickly and effectively. Working as a team is especially critical when taking the individuals into the community for field trips and job training. CBTs indicated that there can be up to 20 individuals and 12 staff participating in the community activity; everyone has the responsibility to maintain safety and watch not only their assigned students but all the individuals. CBTs further noted that when workplace changes occur, working together is essential. Ean explained:

> When change suddenly occurs, I think it is important to let all staff know and each classroom really needs to communicate and work together. Typically, I will let the staff know that I understand why it is difficult now or why it’s confusing.
It takes a while to get this job, you are not going to get it in the first month and furthermore you are probably not going to get it in the first ninety days. It takes a long time and we have all been there. Therefore, we pull through it together and come out on top. (focus group, January 16, 2013)

Emma noted that new staff can be overwhelmed, and sometimes find the idea of teamwork daunting. However, she referenced the value of the P3 in addressing this problem. P3 is mentorship program for new CBTs during the first ninety days of employment to provide direction and mentoring. Emma commented:

It has really helped a lot of people have like a go to person and not feel completely lost in the shuffle, especially since the Lerner School is so large. P3 staff have been very open with me and has really taught them to work as a team. (one-to-one interview, January 25, 2013)

Emma further indicated that several CBTs have “global skills” such as strong writing skills and strong “people skills” that can enhance the work of other staff members. For example, Emma remarked that her own writing skills were very good. Because of this, the classroom staff decided as a group to have Emma review any written documents that need to be sent home.

Mandy indicated that one of the highlights of her job was the collaboration or teamwork when it comes to a student. She said:

If I am working with a student, something that I am just not aware of what to do then I can ask for help from somebody and I get to see how he or she works with them and see their ideas. Then, we can work together and figure out what works best for that student. You know, more brains are better than one. (one-to-one interview, January 18, 2013)

The willingness to be supportive was an important characteristic of successful CBTs who work well as a team. Gabe indicated that reinforcement is not only appropriate for the individuals she works with, but also the staff. When Gabe walked into the
classroom during her field observation, she praised the staff, reinforcing the fact that all their educational and vocational materials were prepared and ready to go. She reinforced the staff on several occasions throughout the observation session to keep them motivated and moving consistently through the day. Gabe noted that although she does not receive much feedback from the staff regarding her frequent delivery of reinforcement, she knows they appreciate it because her staff come to work daily, complete their work, and it helps the classroom of staff work as a team and support each other (field observation, February 14, 2013).

Accepts and provides feedback. All four participants identified the ability to accept and provide feedback from coworkers and/or supervisors as a significant characteristic of successful CBTs. If the feedback was unclear, the staff would clarify with the supervisor or co-worker immediately or as soon as possible. Ean explained:

If I were provided information and unsure what my supervisor was conveying, “I would approach another co-worker with more experience to clarify or approach the supervisor at the end of the day to receive clarification. If the feedback was something that needed to be dealt with immediately, I would make the best judgment and apply what I know. Then, revisit the situation with my supervisor at the end of the day. (initial interview protocol, April 18, 2011)

Emma shared that she would pinpoint exactly what she had misunderstood and ask as soon as possible; if the supervisor were unavailable, then she would approach another co-worker to assist. Furthermore, as a last resort, “I would make an educated sound judgment and then confirm with a supervisor or experienced staff as soon as possible” (initial interview protocol, November 16, 2010).

Mandy noted that the moment she received any type of feedback, she deliberately ignored her spontaneous emotional response:
I think it’s something that automatically crops up, it’s just a human response and I am not looking to make up an excuse or blame someone, it just crosses my mind. Therefore, I set aside the emotions and just reflect on the feedback and how I can improve as a therapist. (focus group, January 16, 2013)

Gabe shared that she has delivered immediate feedback to classroom staff because if she had waited until the end of the day, the moment would have passed and it would be more difficult for the staff to reflect on the situation. For example, Gabe pointed out to one coworker that she had missed treating a behavior with an approved behavior intervention plan. To address this omission, Gabe modeled the behavior intervention plan for the target behavior displayed and invited questions from her co-worker for further clarification. Gabe stressed the importance of modeling something and then following up with questions immediately verses discussing the matter later in the day when the moment has passed and is most likely forgotten (field observation, August 1, 2013).

**Effective communication skills.** Mentor CBTs believed that a significant characteristic of successful CBTs was being an effective communicator. They noted that this characteristic includes the ability to communicate with supervisors, co-workers, or families. Gabe noted:

A CBT must be able to communicate with other staff in the classroom regarding questions or concerns that they may have in the moment and not delay. Hesitating a concern or question can cost much more for an individual with autism then a developing person. A person with autism has no time to waste. (one-to-one interview, January 11, 2013)

Additionally, Gabe explained that because most of the individuals who attend the Lerner School have either limited or no ability to communicate verbally, ongoing communication with parents or guardian(s) was a critical component. For example, if an individual was not feeling well during the school day or did not eat lunch, it is unlikely
that he or she could express this. The CBT would need to observe and interpret these behaviors, then notify family members about the situation. Consequently, CBTs must be the main source of communication to and from the home environment. Moreover, since CBTs are the individual’s “voice” during the school day, the information they share must be precise, accurate, and professional.

When interviewed, Mandy shared that progress reports were one of the most important written communication documents she was required to complete. She explained:

Progress reports are completed quarterly and are sent home to the families and school district to report an individual’s progress. If the individual is not progressing well, then the Lerner school is held accountable and making sure the individuals are up to date and moving along on their IEP’s. (one-to-one interview, January 18, 2013)

Ean similarly reported that when several CBTs work as a team with individuals in a classroom, communication is critical.

One vignette drawn from observational notes demonstrates the importance of effective communication. During the training of a new CBT, Ean was modeling how to be an effective communicator. His actions and verbal comments enabled the new CBT to understand why he was conducting the teaching session in such a manner. Ean explained that the individual (“Mark”) did not like the Calculator Program and that Mark’s surprising response was typically unpredictable. Ean presented the calculator to Mark, strongly reinforcing his behavior as he used it to complete the worksheet (field observation, February 11, 2013). Ean further explained the reasoning behind his reinforcement to the new CBT, making sure to verify with her that she understood his
explanations. Later, Ean told the researcher that the hands-on approach of continuous communication is the best training method for novice CBTs (field observation, February 11, 2013).

**Professional knowledge.** Mentor CBTs considered the following as significant characteristics of successful CBTs in the domain of professional knowledge: (a) prior experience with children affected with a disability; and (b) the ability to implement principles of applied behavior analysis.

**Prior experience with children affected with a disability.** All four participants noted prior experience was a significant characteristic of a successful CBT. The participants all stated that they had had previous experience before their employment at the Lerner School. Mandy noted several experiences working with children while attending high school and college. She frequently reflects on one summer camp experience, which gave her the best insight about children with disabilities. The summer camp was specifically for teenagers with ADD. She explained that the structure of the camp was very similar to the Lerner School in that the staff had certain expectations of the children. Moreover, staff received very specific training to work with the assigned population, and working with the children was a team approach (initial interview protocol, December 6, 2010).

Emma noted that her previous work experience as a home tutor for the Center for Autism Outreach Program had been extremely helpful when she was initially employed at the Lerner School. Since she had previously received training in ABA as a tutor, Emma was assigned to work with a very challenging teenager: “Although it was not easy
because I was working in a different setting, the techniques, philosophy, and support of the staff were equivalent” (one-to-one interview, November 16, 2010).

Ean noted that prior to working at the Lerner School he completed a field experience with elementary students at a rural school where he initially spent much time preparing and developing lesson plans. He stated that his experience grew as he spent more time on his lessons, although it had increased his hours working later at night. Ean described one specific situation “which changed my perspective.” He explained that, “I had a student who was experiencing a divorce between her parents and she was unsure how to react to the situation” (initial interview protocol, April 18, 2011). Ean was able to relate to this individual through his own personal experience and set up times to talk with her throughout the week along with the school counselor.

**Ability to implement principles of ABA.** All four participants identified the knowledge and application of ABA as a significant characteristic of successful CBTs. Although ABA is the teaching methodology of the Lerner School and must be implemented with each individual, the application and consistency of the science is critical.

Mentor CBTs indicated that novice CBTs with previous experience, working with individuals with a disability produce stronger therapists. However, the group pointed out that previous experience utilizing ABA is not always helpful, because training a person to apply a science-based methodology is very different from instilling a passionate attitude about work on a daily basis. During the focus group, all participants agreed that mentor CBTs are continuously learning new approaches and reflecting upon their skills, asking
“is my student progressing quick enough, I should teach that concept differently, I need to change the teaching materials for those skills, I figured it out, but how do I teach this while implementing applied behavior analysis” (focus group, January 16, 2013).

The participants noted that they are ultimately responsible for the individual’s progress; the tools encompassed in ABA provide one means to identify and teach the individuals. Ean shared that he is definitely critiquing everything that he does and uses ABA skills such as “looking to see what happened, what was the consequence of that, and reflecting whether or not in that exact moment what I did was correct or wrong and then figuring out what I could do to improve” (focus group, January 16, 2013). He noted that self-reflection is obviously something he does consistently, but the answers to his questions occur through understanding and applying the science of ABA.

Gabe said that employing ABA is the single most effective teaching methodology for individuals with autism. She further observed that dedicating her career to teaching individuals with autism is hard work because, “I am consistently assessing, constantly being analytical with others, but it works” (focus group, January 16, 2013). According to Gabe, success was also noted as, a CBT with a good foundation in ABA, who would be able to work with anyone in this population. For example, Gabe states:

The science can be applied to an 18 month old that is coming in with a new diagnosis or a 22 year old who is going to be transitioning into the work world. If you are able to fall back on your foundations of Applied Behavior Analysis then you will be able to apply quality therapy to individuals of all ages and ability levels. (one-to-one interview, January 11, 2013)

During a field observation, Emma was working with two individuals. One was on the computer completing a writing assignment, and the other was completing a math
worksheet. As the students worked, Emma reinforced them specifically for staying on task. At one point Emma said to the one individual, “You have five more minutes to complete your writing task and then check your schedule for your next assignment” (field observation, February 6, 2013). Meanwhile, the student working on his math worksheet began to engage in aggressive behavior. He had a formalized behavior plan to treat this behavior when it occurred. As a result, Emma redirected the individual’s behavior, set a timer for a 5-minute interval, and removed a token from the individual’s token board. Simultaneously, the other CBTs in the classroom immediately started reinforcing the other students and were prepared to assist Emma if necessary. Emma’s procedures in the classroom were examples of the application of ABA.

Summary of Mentor CBTs

Through data analysis, 11 themes emerged as significant characteristics of successful classroom behavior therapists working in a self-contained setting with individuals with moderate to severe autism. These characteristics included six themes in the domain of personal efficacy; three themes in the domain of interactive skills; and two themes in the domain of professional knowledge. For personal efficacy, participants identified the following: (a) problem solver, (b) passionate, (c) perseverance, (d) goal oriented, (e) organized, and (f) decision maker. For interactive skills, participants identified the following: (a) team player, (b) accepts and provides feedback, and (c) effective communication skills. For professional knowledge, participants identified the
following: (a) prior experience with children affected with a disability, and (b) ability to implement principles of applied behavior analysis.

**Cross Case Analysis**

The purpose of this descriptive case study was to determine the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism. A cross case analysis of the data revealed that both novice and mentor CBTs identified characteristics that fell into three broad categories or domains: (a) personal efficacy; (b) interactive skills; and (c) professional knowledge. Comparison of themes within and across cases revealed several similarities as well as a few differences in the characteristics identified by each group.

Mentor and novice CBTs identified 8 significant characteristics of successful CBTs. For personal efficacy, mentor and novice CBTs identified the following: (a) problem solver, (b) passionate, (c) goal oriented, and (d) organized. For interactive skills, mentor and novice CBTs identified the following: (a) team player, and (b) accepts and provides feedback. For professional knowledge, mentor and novice CBTs identified the following characteristics as significant of successful CBTs: (a) prior experience with children affected with a disability, and (b) ability to implement principles of applied behavior analysis.

Results of the cross-case analysis are followed by a discussion of findings that address the research question guiding this study: What are the personal and professional
characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

**Personal Efficacy**

Both similarities and differences in the experiences of the two groups for personal efficacy were identified. Both groups noted that problem solving was critical to the success of a CBT. Data supported this similarity based on the intensity of the daily responsibilities of a CBT and the necessity to think on their feet quickly due to the severe needs of the individuals attending the Lerner School. Only novice CBTs indicated that being a time manager was essential to be successful in the position. This may be attributed in part to the extra time novices require to complete their work, particularly since many of them were still receiving training through the mentorship program and applying information which would be relatively new and unfamiliar. Based on their longer work experience, it may be that mentor CBTs have become more proficient at time management.

In the domain of personal efficacy, being passionate was identified as a strong similarity in both novice and mentor CBTs. Neither group was able to provide a solid definition when referring to themselves as passionate. However, they did note that their passion for what they do on a daily basis had been developed in part from past experiences with individuals with disabilities, in some cases family members who have a disability. Such experiences helped them understand the unique educational preparation needed to teach children who learn differently. Mentor CBTs noted the deep gratification they felt when an individual with whom they had worked every day over several years
had achieved his or her goals because they understood how much the quality of that individual’s life would improve. Mentor CBTs also indicated that on the most challenging days at the Lerner school, being passionate is the only thing that can provide optimism.

Mentor CBTs indicated that perseverance was a critical characteristic of successful CBTs. Based on a longer work history, mentor CBTs noted that time and experience prepared them emotionally and physically while handling the severe population of individuals with whom they work. Novice CBTs had neither the exposure to a multitude of experiences, nor an opportunity to reflect on and grow from them. Consequently, their failure to identify perseverance as an important characteristic is not surprising.

Perhaps in part because they lacked professional experiences upon which to build expertise, all the novice CBTs expressed the desire to continue their education as another factor of a successful CBT. Mentor CBTs believed that being goal oriented was a characteristic of successful CBTs, specifically when it came to higher education. However, this trait did not develop into a pattern for mentor CBTs, even though all of them said that they had been or were planning to enroll in a master’s program within the year. By contrast, three of the four novice CBTs said they were eager to gain further education, but all were in the early stages, primarily because they have recently completed their undergraduate program and their CBT position at the Lerner school is their first place of employment.
Mentor CBTs stated that being organized led to other advantages, such as increased time management, delegating job duties, and accepting higher level job assignments. Novice CBTs also displayed characteristics of organization, but related it to classroom materials being organized and the work space. Both groups would agree that without organization, tracking a student’s daily progress would be next to impossible.

Mentor CBTs also noted that being a decision maker was a critical element to being a successful CBT. Throughout the work day, mentor CBTs are continually communicating with staff and supervisors, usually because they are the lead staff in the classroom and have the most responsibility when a supervisor is not present. As a result, mentor CBTs must be able to make a decision in the moment, understanding the potential consequences, and if necessary make adaptations if the decision was not appropriate once they have spoken with a supervisor.

Although novice CBTs are sometimes responsible for a significant decision because a mentor is unavailable, they did not identify being a decision-maker as a characteristic. This difference in the two groups may reflect the nature of their professional responsibilities, but it may also be due in part to the fact that novice CBTs lack the breadth of experience to understand the potential consequences if a wrong decision is made.

**Interactive skills**

The cross-case analysis revealed that mentor and novice CBTs believed that being a team player was an important characteristic for successful CBTs. They thought that functioning well as a team was critical for the progress of the individuals being taught.
and found it important for staff to agree on educational and behavioral issues that concerned individual students. Both groups noted that during the school day they depended on one another, voiced their opinions when necessary, and worked together to complete something for the benefit of all students.

All participants similarly agreed that accepting and providing feedback was a core characteristic for successful CBTs. The data identified that novice CBTs were more likely to be the individuals accepting the feedback rather than giving feedback because novice CBTs have less experience of the job. However, mentor CBTs practiced and implemented both and were exceptionally professional if they were the ones to deliver the feedback. Mentor CBTs further noted that a successful CBT must have effective communication skills. Mentor CBTs added that they need to know when and how to deliver information as well as how to demonstrate a professional manner to which others will respond positively. Mentor CBTs noted that it is easy to deliver feedback but if it is not communicated in the proper fashion, then an entire team of CBTs can fall apart, leading to a negative learning environment.

Professional Knowledge

After conducting a cross-case analysis, mentor and novice CBTs identified both identified two important dimensions of professional knowledge. They agreed that the application of ABA and that having prior experience with children affected with a disability were important characteristics for successful CBTs. A significant amount of data supported the fact that prior experience could have a tremendous impact on the success of a CBT. According to both novice and mentor CBTs, prior experience might
include a range of experiences, including participation at a summer day camp, fieldwork experience in college, or having a family member with a disability.

While novice and mentor CBTs acknowledged that ABA was part of the CBT job description, effective implementation was the key. Mentor CBTs have an extensive role in identifying whether a novice CBT has acquired or maintained the proper training and mechanics of ABA and if they are able to consistently implement the Science. Moreover, mentor CBTs also need to maintain their skills and enhance their learning so that they can remain current about improved methods of applied behavior analysis.

**Findings**

Synthesis of the cross-case comparison yielded significant findings that addressed the research question: "What are the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?"

First, when examining the cases collectively, more personal than professional characteristics were identified by both novice and mentor CBTs. Moreover, the overwhelming majority of personal characteristics appeared in the category of personal efficacy. One finding of this study, then, is an increased awareness that a range of personal qualities may be a better predictor of success as a CBT than the professional knowledge a potential candidate brings to the job. Moreover, those characteristics that suggest that the CBT has a sense of personal efficacy may ultimately be the most essential personal qualities of a CBT.
Findings of this study unequivocally demonstrated that a successful CBT must believe not only in the importance of the job, but also in his or her ability to do it well. To that end, a successful CBT draws on a number of personal qualities and experiences in addition to professional knowledge. The findings did identify professional knowledge as one of the three major categories for this study.

While some of that is the result of educational training, some of it is also from personal experience. It is worth noting that all participants identified being passionate as a characteristic of successful CBTs. Yet, when asked to define this term, the participants agreed it was a good question but did not know how to place it into words; it was just something they felt internally because they love what they do.

Interestingly, each response was built around a previous experience or personal influence. The difficulty of defining “passion,” but its prominence as a quality of personal efficacy may suggest why it is often hard to predict whether a job candidate will be successful. It is clear from results of this study that successful CBTs cannot be determined chiefly through the professional knowledge they bring to the job.
CHAPTER V
CONCLUSIONS

This study explored the personal and professional characteristics of successful Classroom Behavior Therapists (CBTs) working in a self-contained setting with individuals who have moderate to severe autism. The study focused on those characteristics, as they are perceived by novice and mentor CBTs who have themselves been successful in a particular setting. Several themes emerged within and across the two groups. These were then organized into three broad categories of characteristics: (a) personal efficacy; (b) interactive skills; and (c) professional knowledge. A cross-case comparison then generated findings that addressed the research question:

1. What are the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1a. What are the personal and professional characteristics of successful novice classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?

1b. What are the personal and professional characteristics of successful mentor classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism?
This chapter will discuss conclusions and implications drawn from those findings. The chapter is organized into three major sections. First, an overview of the study will be described, research questions will be presented, and the research methodology will be explained. Second, findings and conclusions are presented. Third, implications of the findings for a number of stakeholders are discussed followed by recommendations for future research.

**Background**

The goal of this qualitative study was to probe the beliefs of a group of successful novice and mentor CBTs. The researcher selected these participants to determine what both groups believed were the most important characteristics of a successful CBT. It was believed that by identifying characteristics, which emerged across both groups, administrators and other stakeholders would gain insights that might be valuable. The areas of value include hiring, training, supervising, and supporting current and future personnel. With characteristics identified in potential candidates, the researcher’s goal was to highlight strong candidates from the mediocre.

**Research Methods**

To answer the research questions, this study used a case study qualitative research design (Merriam, 2009). The study took place at the Lerner School located in the Cleveland Clinic Center for Autism. All eight participants were employed by the same employer and selected based upon specific criteria developed by the researcher that provided evidence of their professional effectiveness. As an educator and administrator in this setting for several years, the researcher had access to ample evidence of
professional effectiveness. She hoped that understanding how a group of effective new
and veteran CBTs understood which qualities were essential for success would provide
insights from an employee perspective.

Patton (2002) wrote, “a case study should take the reader into the case situation
and experience – a person’s life, a group’s life, or a program’s life” (p. 450).
 Instruments used in qualitative research are few; in fact, the researcher is most
commonly considered the primary instrument for data collection, analysis, and
interpretation (Paisley & Reeves, 2001). In this study, four major data sources were
used to gain information related to the research questions: (a) individual interview with
all participants; (b) two focus groups of CBT mentors and novice CBTs; (c)
observations; and (d) documents related to the participants’ pre-hire interview process.
Approval to collect data was provided by The University of Akron IRB (Appendix A)
and the Cleveland Clinic IRB (see Appendix B).

Data analysis focused on first identifying patterns or themes within each case that
were organized into categories. The development of categories from the raw data, which
captures key themes and processes important according to the researcher, was the
primary method of data analysis (Thomas, 2003). After analysis of both cases
independently, a cross-case analysis compared categories that resulted in the generation
of findings, which addressed the research questions.

Results of the Study

The research question specifically sought evidence of personal and professional
characteristics that appeared critical for successful CBTs. Data analysis generated three
broad categories, two related to personal qualities (i.e., personal efficacy and interactive skills) and one that related to professional qualities (i.e., professional knowledge).

A number of themes emerged during data analysis that resulted in a variety of individual factors within each category. Under personal efficacy, successful CBTs were found to be (a) problem solvers; (b) passionate; (c) goal orientated; and (d) organized. For interactive skills, they were found to be (a) team players who (b) accepted and provided feedback. In terms of professional knowledge, successful CBTs had (a) prior experience with children affected with a disability; and (b) the ability to implement principles of applied behavior analysis.

First, when examined collectively, significantly more personal than professional characteristics were identified by both novice and mentor CBTs. Moreover, the overwhelming majority of personal characteristics appeared in the category of personal efficacy. Results of data analysis demonstrated that a successful CBT must believe not only in the importance of the job, but also in his or her ability to do it well. To that end, a successful CBT draws on a number of personal qualities and experiences in addition to professional knowledge. One finding of this study, then, is an increased awareness that a range of personal qualities may be a better predictor of success as a CBT than the professional knowledge a potential candidate brings to the job. Moreover, those characteristics which suggest that the CBT has a sense of personal efficacy may ultimately be the most essential personal qualities of a CBT.

The findings further confirmed the importance of professional knowledge, which emerged as one of the three major categories for this study. Powers (2009) highlighted professional knowledge and emphasized that specialized trained and experienced teachers
who understand this complex disorder should have the responsibility to teach individuals with autism. All eight participants illustrated the significance and impact of real life experience with individuals with disabilities prior to their employment at the Lerner School. As one participant, Kelly, eloquently stated,

You can teach concepts but not the emotional and you know, attachment that you have to your job to make you want to come to work every day and you know, it's not motivating if you don’t really care about what you do. (focus group, February 1, 2013)

Additionally, the findings from this study did not predict a successful CBT through acquiring theoretical or content knowledge in Applied Behavior Analysis as a single element. More importantly, the ability to apply that knowledge while working with an individual with a disability was what mattered. In other words, having prior experience with individuals with a disability, emphasizing personal efficacy, and then the skills to apply the teaching methodology was most relevant.

While some of that is the result of educational training, some of it is also from personal experience. It is worth noting that all participants identified being passionate as a characteristic of successful CBTs. Yet, when asked to define this term, the participants all responded differently. Several of the participants indicated that it was a good question but did not know how to place it into words; it was just something they felt internally because they love what they do.

Interestingly, each response was built around a previous experience or personal influence. The difficulty of defining “passion” and its prominence as a quality of personal efficacy may suggest why it is often hard to predict whether a job candidate will be
successful. It is clear from results of this study that successful CBTs cannot be
determined chiefly through the professional knowledge they bring to the job.

Conclusions

Analysis of data across the participants and three domains (personal efficacy,
interactive skills, and professional knowledge) found common themes that included the
following. For personal efficacy, six broad patterns emerged: (a) problem solver; (b) time
manager; (c) passionate; (d) goal oriented; (e) organized and; (f) eager to gain further
education. For interactive skills, two broad patterns emerged: (a) team player and; (b)
accepts and provides feedback. For professional knowledge, two broad patterns
emerged: (a) prior experience with children affected with a disability and; (b) the ability
to implement principles of applied behavior analysis.

Findings of this study revealed that novice and mentor CBTs identified
characteristics within the domains of personal and professional skills, with emphasis in
the personal domain, specifically efficacy. Outcomes of this study are consistent with
prior research that advocates seeking to hire educators who have personal and
professional strengths (Rutledge et al., 2008). Similarly, Beutel et al. (2010) found that an
efficient personnel interview process is most useful for assessing a candidate’s
communication style, teaching experience, and interpersonal skills. Results further
support research that finds personal skills particularly important. For example, Sapir and
Wilson (2001) observed the personnel selection process for intervention specialists
requires specialized attention to personal qualities, since the job requirements are
singularly dependent on particular personal characteristics of the educator.
Results of this study found that both novice and mentor CBTs consider themselves passionate individuals, especially when working with the autism population, largely because the day-to-day classroom challenges can be best met if the CBT has a deep commitment. This finding supports research conducted by Hynes et al. (2012), who identified that passion was a significant characteristic for school administrators to seek in teacher candidates. Cox (2001) found that the number of individuals with autism will continue to increase over time, resulting in increased demands on staff for which prior experience or problem solving skills alone will not be adequate. He observed that an internal motivation must exist. As one CBT stated,

> We would do anything for our kids whether it is helping them in the classroom academically or strive to meet goals outside the classroom, community, or at their home. If you do not have the passion or that drive or that motivation then you wouldn’t want to come to this job daily, you won’t succeed at the job because you have to have that, almost like above and beyond mentally to get through the day. (focus group, February 2, 2013)

All novice CBTs identified furthering their education as a priority and supported this statement by sharing that they were currently in or planned to enroll in a master’s program within the year. The mentor CBTs did not identify (or reject) this as a significant factor in a CBTs success, although most of them did have some advanced education themselves. It may be that novices feel the need to deepen their professional knowledge, but mentors rely more heavily on knowledge and experience gained “on the job.” However, while the novice CBTs clearly valued more education, the researcher was unable to identify any studies supporting the importance of furthering their education as a significant characteristic of successful job performance. Given that this did not emerge as
a characteristic across both groups, the absence of such scholarly research may not be surprising.

Results of this study found successful CBTs are organized in several ways, particularly with regard to the classroom environment, the development of student curriculum, and their correspondence. These findings are consistent with Berliner’s (1984) research, which identified four factors as particularly important for effective teachers when creating a classroom culture. One, the need to establish a safe, orderly classroom, is especially pertinent in this situation. Schopler et al. (1995) supported the idea that individuals with autism require an organized classroom to ensure an optimal learning environment. Such organization can include any of the following: (a) arrangement of the environment; (b) visual schedules, which allow students to work independently and know exactly the teacher’s expectation related to task completion; (c) work systems, which tell students what and how a task should be completed including how much; and (d) task organization, which gives the student a visual representation of tasks to tackle first (Schopler et al, 1995). Results of this study clearly support these findings. In fact, the findings of this study regarding organization endorse a number of similar factors e.g., access to teaching materials, increased time management, and safety when implementing behavior management techniques.

Results of this study also found that the concept of “team player” was a critical characteristic of successful CBTs. This finding is consistent with research by Hopkins and Stem (1995) proving that teamwork contributes to the skills of an effective educator. Additionally, research conducted by Mowday et al. (1982) found that organizational goals established as a team were highly valued and enhance an organization’s efforts to
achieve its goals both as a company and as individual employees. Lee (2005) found that hiring administrators seek teacher candidates who were characterized as team players and strong communicators with their colleagues. Similarly, Hynes et al. (2012) found that school administrators identified teamwork as a significant characteristic in the hiring process.

Furthermore, findings of this study confirm research conducted by Hopkins and Stem (1995), who found that the pinnacle characteristics of high quality intervention specialist teacher candidates were dedication, care for children, collaborative efforts with other teachers, and the ability to reflect on their own teaching behavior. Although their research also identified mastery of various teaching models as a characteristic of successful educators, that was not a finding in this study.

Participants believed that having had experience with children affected with a disability prior to employment seemed to contribute as a characteristic of successful CBTs. Although they do not directly address the source of a teacher’s experience, a number of studies have noted the value of wide experience for teachers working with students who have a disability (Fenlon, 2008; Powers, 2009). Fenlon’s (2008) research suggested that intervention specialists with previous experience educating individuals with significant disabilities can be the difference between minimal and substantial learning for that individual.

An important finding of this study is that knowledge concerning the application of ABA is critical to success as a CBT. This finding is consistent with research by Brophy and Good (1984), who conducted a study that identified three clusters of effective teacher characteristics: (a) teacher’s knowledge of the student; (b) teacher’s knowledge of the
academic content and; (c) pedagogic knowledge. ABA embraces two kinds of teacher knowledge i.e., understanding the academic content and understanding the pedagogy of how to implement or apply the information. Moreover, Powers (2009) concluded that a successful educational program for individuals with autism requires intensive services endorsed by highly trained professionals.

Studies by Mitchell and Arnold (2004) pointed out “the importance of behavioral management skills at the classroom and individual level and understanding of the psychological and developmental levels of their students is critical” (p. 89). Results of this study found that all eight participants agreed that data based instruction enhanced the skills of the individuals they taught. Unfortunately, some scholars have questioned the quality of available training, since many interventions with individuals with autism lack scientific data to support treatment effectiveness (Heflin & Simpson, 1998).

**Implications**

This study provides insights into the personal and professional characteristics of successful CBTs as they are perceived by successful novice and mentor CBTs. While a body of scholarly research does provide evidence of core characteristics of quality educators, a thorough review of literature determined a need to identify additional factors to consider when hiring and supporting intervention specialists. For example, Special Education teachers must have a willingness to collaborate and share their knowledge, skills, and drive’ with other educators and families to benefit the students they serve (Fenlon, 2008). Additionally, Smith (2005) identified good teachers as having respect for the student, modeling timeliness and moral values, and providing feedback which is honest and constructive. Teamwork is also seen as an integral part of the quality of
teaching. A major premise of this study is that CBTs who were currently employed and recognized as effective professionals might contribute valuable insights about what characteristics to assess in prospective employees. According to Stough and Palmer (2003), extensive knowledge base about students enabled teachers to (a) assess their students both academically and emotionally and (b) effectively address the students’ needs within the classroom. In other words, effective special education instruction is the knowledgeable, reflective, and concerned responsiveness of teachers to individual students. This section presents implications for those preparing to become CBTs as well as for other stakeholders who can benefit this information i.e., a CBT supervisors; (b) school administrators; and (c) higher education personnel. This section also discusses implications of the study’s findings for future research.

**Implications for CBTs**

The findings revealed how critical it is for CBTs to have prior experience with individuals with disabilities before applying for a CBT position. One implication of this study is the recommendation that CBTs actively seek prior experience with individuals who have a disability in a setting such as: (a) a summer camp; (b) home tutoring; (c) baby-sitting; or (d) volunteer opportunities within a setting such as the Lerner School. Additionally, the Lerner School provides college internships, which have been a chief source of experience for individuals who graduated from college, applied for a CBT position, and were immediately hired due to completion of a successful internship experience. Although data analysis identified that prior experience with individuals with a disability is clearly desirable because it deepens professional knowledge, findings do not indicate that a CBT is ineligible or inappropriate to hire without prior experience.
However, prior experience may provide the CBT candidate a better understanding of individuals with disabilities and significantly increase success in teaching these students. During an internship opportunity or previous experience, an individual has the opportunity to not only gain educational experience but typically arrives at the conclusion that they love working with the population of individuals with disabilities and begin developing a passion for this group of individuals. Likewise, upon graduating, these individuals are fueled with passion and tend to look for employment opportunities, which will allow them to grow professionally, and help others learn.

The findings of this study indicate that accepting and providing feedback is a personal characteristic of successful CBTs. This study found that when novice CBTs receive feedback, they often internalize it as criticism. This may be because CBTs are young and inexperienced. Emily commented, “Since this is the first professional job for many CBTs…when a CBT is told they need improvement in a certain area, they are initially defensive because it’s hard work.” She added that it is the “willingness to accept and implement the changes and apply them with the knowledge given” that matters (one-on-one interview with Emily, January 25, 2013). One implication for novice CBTs, then, is to recognize that feedback is an important part of professional growth and to accept feedback from peers and supervisors. On a professional level, CBT’s may obtain feedback during the day, in the moment, while working through a behavior, out in the community, and one of the most critical pieces is to receive the feedback professionally. Professional discourse with a supervisor or colleague is extremely important even during moments of intense pressure. With this being said, the delivery of the feedback from a mentor, supervisor, or colleague is just as important. One’s reaction and response to
feedback is often dependent on the delivery of the information. The more calm, specific, and direct communication of the feedback, the more likely the CBT will respond positively to their mentor. Furthermore, since findings indicated that providing feedback was also an important skill, CBTs should also learn how to provide it for others in meaningful ways.

**Implications for CBT Supervisors**

This researcher found that in the domain of professional knowledge, the ability to implement ABA was a critical characteristic of successful CBTs. Findings indicate that once a CBT is trained in basic ABA content knowledge in the form of scholarly knowledge, the need for practical experience in the implementation of the content is essential. Consequently, CBT supervisors should develop mentorship programs that support implementation of ABA.

Although the Lerner School does have such a mentorship program in place, it is designed to assist new CBTs with the implementation of ABA once they receive the content knowledge of ABA in their first week of employment. It is unclear, however, whether the implementation skills honed in one environment will transfer to another should the CBT change settings and work with different individuals. For example, Emily noted:

Prior to being hired as a CBT, I was an in-home ABA tutor for a teenager with severe autism. During my initial interview for a CBT position at the Lerner School, one of my responses was that most of my experience was with teenagers and I feel most comfortable with this age level. Plus, I have an undergraduate degree in high school English so most of my prior experience is with high school students. However, at the time the opening was to work with preschoolers only. Although I was apprehensive, I was so eager to work at the Lerner School, I took the position. Unfortunately, I was never quite comfortable in the preschool setting but I took the challenge and learned to work with younger children. Looking
back, I am proud that I took on a new challenge and feel that it started me on a path of accepting my strengths and weaknesses. After a year in the preschool, I was able to move into a classroom and work with teenagers and to this day, love every minute of teaching teenagers (one-on-one, January 25, 2013).

Emily’s observation confirms the importance of prior experience with an individual who has disabilities. It also suggests that each new setting or student population is unique so that implementation skills honed in one setting are not always useful in another. Because of this CBTs need time to adjust and adapt to new classroom environments and the individuals in which they are assigned to work with.

A formal mentorship experience, then, might be important each time a CBT is transferred to a new setting. CBT supervisors need to mentor, as well as manage and supervise staff, not only in initial training but also when they are assigned a new student or classroom environment. It may be helpful to give CBTs an opportunity to voice their ideal classroom environment or age of child with whom to work as part of the initial interview process.

Furthermore, CBT supervisors need to develop a strategic ongoing training program to assist CBTs to implement ABA in a broader spectrum. Then, if staff changes occur, the individuals with autism are not losing learning opportunities because a CBT lacks the appropriate skill set to teach them. CBT supervisors may even need to implement training sessions, in-services, and/or workshops throughout the school year so that CBTs can consistently maintain and increase their skill sets when applying ABA.

**Implications for School Administrators**

Results of this study revealed that the focal point for identifying successful CBTs is during the interview process in which the current hiring process needs to change
(Cohen & Gump, 1984). This finding aligns with the prior findings of Vornberg and Liles (1983). Their research indicates that at least 85% of educational administrators regard the employment interview process as a critical factor in hiring teachers. However, one major implication of this study is the urgent need for school administrators to identify characteristics, which will best suit educators for their educational environments. This study found that certain characteristics were fundamental to specific learning environments such as the Lerner School and could perhaps apply in other ABA programs such as Eden Institute in New Jersey or the Princeton Childhood Development Institute (PCDI). Engel and Erion (1984) found that school administrators understood that hiring quality educators was fundamental to the academic success of operating schools. Consequently, one implication of this study is that school administrators must identify personal characteristics, specifically in the domain of personal efficacy, and evaluate their importance as they pertain to their specific educational environments.

In general, there are few interview instruments available for hiring educators. In any case, such instruments would be of limited value, because hiring individuals for various disability populations requires a separate instrument (Eder, 1999). According to Little and Miller (2007), school districts require a structured process for identifying and selecting qualified staff. Simultaneously, research conducted by Little and Miller suggested there are limited data to record the personnel selection within the education sector. To that end, there are no commercially available interview instruments designed to assist administrators in hiring intervention specialists (Beutel et al., 2010). As a result, the need for school administrators to develop an interview instrument is imperative. Results of this study could support the development of an effective instrument.
This study found that novice CBTs believe further education is central to becoming a successful professional. One implication of this finding is that district administrative personnel should seek ways to hiring ongoing educational support staff, including incentives and opportunities to further their formal education. An organization may offer financial support through tuition reimbursement or salary incentives so staff members earn advanced degrees. Administrators may also support flexible hours that would enable staff to take appropriate courses that may be offered during the workday. In addition, offering professional development opportunities (e.g., electronic or on-site workshops) can also deepen a staff member’s professional content and pedagogical knowledge. Such opportunities will also enhance the organization by improving the expertise of its staff.

**Implications for Higher Education Personnel**

Both novice and mentor CBTs agreed ABA was a highly effective teaching approach for individuals with autism. This approach requires not only content and pedagogical knowledge but also applied practice. Because of this, higher education personnel should include such training in the educational curricula of all students pursuing a career in special education or working with the autism population. At the Lerner school, the student field experience program looks to college students to learn the basics of applied behavior analysis and then with mentoring for an existing staff, to eventually work with the children independently. The product of the student field placement program is well established for over 7 years and is extremely successful. As a result, over 16 staff have been hired at the Lerner School who had taken part in a student field experience. The beauty of the placement program is that when the individual applies
for a position, the hiring Administrator already has a good sense that the individual has been trained, has been imbedded in the culture of the Center and is typically in love with the children to work with the children. Currently, the Lerner School has three Universities with which they have collaborated, all within a sixty-mile radius of the Lerner School. However, additional student placement experiences must continue to expand because college students are increasingly becoming more and more interested in working with the autism population. Unfortunately, not all individuals who apply for a student experience can partake in the program due to limited positions.

Additionally, higher education personnel need to educate themselves regarding local autism programs/resources to provide their students opportunities to volunteer and gain valuable hands-on experience in preparation for their career. Higher education personnel also need to identify and develop partnerships with local schools and programs who serve the autism population. The benefits of a collaboration would benefit the children affected with autism as well as the students studying and preparing to devote their career to help these individuals. Field experience partnerships would also cultivate and provide a solution for the growing political concern over educator licensure.

Currently, future educators with the intention to work with the autism population are required to select a specific licensure and they must complete their field experience related to the field experience. Unfortunately, autism currently does not have specific licensure/endorsement and if there is not a specific partnership between the University and field experience placement then there is no guarantee that the student will work with individuals on the autism spectrum.
Recommendations for Future Research

This research study identified the personal and professional characteristics of successful classroom behavior therapists working in a self-contained setting with individuals who have moderate to severe autism. Results of this study also suggest direction for future research. First, this study interviewed novice and mentor CBTs working in one particular setting. Since each setting has unique contextual and personnel factors which influence themes, categories and ultimate findings, similar studies should be conducted with novice and mentor CBTs working in diverse settings. The Lerner School, for example, is an expensive private institution connected to a hospital. Other studies could be conducted in both public and private schools which serve diverse socioeconomic populations.

Similarly, studies that involve a different set of participants working with individuals with mild to moderate autism might yield different results. In addition, the participants in this study held various college degrees; in a replication study, the participants could be represented by certified intervention specialists only. Comparison of results across all these studies might provide even deeper insights about the characteristics of successful CBTs which might enhance both hiring and job performance across all populations and settings.

This study used specific criteria to identify eight participants from two specific job categories: novice and mentor CBTs. Although their information met the criteria for this study, additional studies are needed to provide a comprehensive range of staffing levels, experience, and managerial representation. Additionally, it might be useful to
select similar participants based on the criteria from this study, increase the database based on the same research questions, and compare the outcomes.

Another study of interest should include reviewing the themes developed from this current research design and identify how to measure them. This would permit administrators a baseline definition to refer. Themes such as efficacy and passion may reveal multiple meanings from a variety of candidates; therefore present confusion for the administrator. By clarifying these terms, the hiring process may become less diluted.

Lastly, further studies should examine whether the characteristics applied to an interview protocol based on the findings of this study are valuable. As a result, an interview protocol needs to be created with the characteristics identified in this study, and then implement the instrument at the Lerner School or similar setting. The findings of this study presented three domains: personal efficacy, interactive skills, and professional knowledge. Although the researcher developed these domains specifically, future research could examine whether additional domains emerge based on the participants experience, educational background, or research setting.
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APPENDICES
APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

THE UNIVERSITY OF AKRON
Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
(330) 972-7666 Office

NOTICE OF APPROVAL

October 8, 2012

Francine Dimitriou
27020 Cedar Road, 216
Beachwood, Ohio 44122

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20120923 “Attributes of Successful Educators Working with Individuals on the Autism Spectrum”

Thank you for submitting your IRB Application for Review of Research Involving Human Subjects for the referenced project. Your application was approved on October 8, 2012. Your protocol represents minimal risk to subjects and matches the following federal category for exemption:

☑ Exemption 2 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior.

☐ Exemption 3 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior not exempt under category 2, but subjects are elected or appointed public officials or candidates for public office.

☐ Exemption 4 - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.

☐ Exemption 5 - Research and demonstration projects conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine public programs or benefits.

☐ Exemption 6 - Taste and food quality evaluation and consumer acceptance studies.

Annual continuation applications are not required for exempt projects. If you make changes to the study’s design or procedures that increase the risk to subjects or include activities that do not fall within the approved exemption category, please contact me to discuss whether or not a new application must be submitted. Any such changes or modifications must be reviewed and approved by the IRB prior to implementation.

Please retain this letter for your files. This office will hold your exemption application for a period of three years from the approval date. If you wish to continue this protocol beyond this period, you will need to submit another Exemption Request. If the research is being conducted for a master's thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

☑ Approved consent form/s enclosed

Cc: Francis Broadway - Advisor
Cc: Valerie Callanan - IRB Chair

The University of Akron is an Equal Education and Employment Institution
APPENDIX B

INTERNAL REVIEW BOARD APPROVAL

CLEVELAND CLINIC

CCF IRB Department (2)

Me From: irb@ccf.org > Sent: Friday, October 12, 2012 4:40 PM >
To: Dimitriou, Francine > Subject: Attributes of Successful Educators Working with Individuals on the Autism Spectrum

To Me

Jan 20

From: irb@ccf.org

> Sent: Friday, October 12, 2012 4:40 PM
> To: Dimitriou, Francine
> Subject: Attributes of Successful Educators Working with Individuals on the Autism Spectrum
>
> Dear Ms. Francine Dimitriou,
>
> Your online Initial Application submission for the above referenced protocol can not be processed for the following reason(s):
>
> The IRB considers this activity an internal QA/QI service with the intent to improve patient care operations/processes. Human subject protection regulations are not applicable for the QI/QA activity and IRB approval is not required.
>
> The system has unlocked your submission so you can address these issues and/or re-submit if necessary.
>
> If you have any questions, please contact the IRB Office.
APPENDIX C

PARTICIPANT CONSENT FORM

Informed Consent From

Principal Investigator: Francine Dimitriou

Title of Study: Characteristics of Successful Educators Working with Individuals on the AUTISM Spectrum

You are invited to participate in a study being conducted by Francine Dimitriou, Department of School Administration at the Cleveland Clinic Center for AUTISM (CCCA) and a doctoral student from the College of Education, Department of Curriculum and Instruction, The University of Akron, Akron, Ohio.

You are invited to participate in a focus group/1:1 interview/observation within the classroom setting. I am interested in finding out your views regarding characteristics of teaching staff working at CCCA. Your participation in this study will require participation in a focus group/1:1 interview/observation within the classroom setting. This should take approximately 2 hours of your time. Your responses and overall results of this study will be shared with Administration at CCCA, however your identity will be kept confidential and you will not be contacted again in the future. The focus group will include other CCCA staff participating in this study; therefore all participants will be requested to maintain confidentiality of all responses discussed during and outside of the focus group discussion. You will be paid $20.00 for being in this study.
This focus group/1:1 interview/observation within the classroom setting does involve potential risk to you.

Protecting your responses and engagement during the research study ranks as one of the highest levels of concern for the investigator since your responses and participation are at the core of this research project. Without the fullest confidence in the research project, the outcomes will vary and the research efficacy will be affected.

The investigator will take the following precautions to minimize identified and unidentified risks related to you: clear expectations of both the investigator and yourself as a participant listed on the consent form prior to the research being conducted (including the expectation that conversations and information will not be discussed/shared with other study participants at CCCA. Additionally, the study results will be shared with CCCA Administration to enhance the personnel selection process at the Center based school program in which all participants are employed). The benefits of your participation may impact CCCA by defining characteristics of successful teaching staff that will be utilized in future hiring processes.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. The investigator will be happy to answer any questions you have about this study. All interviews will be recorded on audiotapes and then transcribed. During the research study, all data will be stored in a locked and secured cabinet at the investigator's residence for a sixth month duration after the dissertation has been published. At the sixth month mark, the investigator will shred the data and destroy the audiotapes. If you have further questions about this project or if you have a research-related problem, you may contact me,
Francine Dimitriou at 216-544-3665. If you have any questions about your rights as a research participant you may contact The University of Akron Institutional Review Board (IRB) at (330) 972-7666. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Your anonymity will be protected through the use of pseudonyms in this and any future publications or presentations. Please understand that you may be quoted directly but your name will not be used in any part of the report. Additionally, all data will be stored in a secure location.

Thank you for your participation,

Francine Dimitriou

I have read the above and discussed it with the researcher. I understand the study and I agree to participate.

_____________________________________________ (Signature)
_____________________________________________ (Date)

In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature _____________________________ Date __________________

Signature of person obtaining consent ___________________ Date ____________

Printed name of person obtaining consent ______________ Date ____________
APPENDIX D

1:1 INTERVIEW QUESTIONS

Participant Name: _____________________________
Date of Interview: _____________________________

A. Experience and Behavior questions

1. Tell me about your job and your daily responsibilities?

2. Tell me 3 things you like about your job?

3. If a TEACHER candidate asked you what was most important in your work what would you answer?

4. How would you define "success" for someone in your chosen career?

5. Give me an example of when you were able to meet the personal and professional demands in your life yet still maintained a healthy balance?

B. Opinion and values question

6. What do you feel a TEACHER candidate needs to encompass to work at CCCA?

7. If you could change one thing about your job as a TEACHER what would it be and why?

C. Feeling questions

8. How do you feel about the work you do on a daily basis?

9. How has your experience at CCCA changed you from the time you initially started your job?

10. Describe a time when you took personal accountability for a conflict and initiated contact with the individual(s) involved to explain your actions?
D. Knowledge question
   11. Please discuss an important written document you were required to complete?

   12. Tell me about a time you were able to successfully deal with another person even when that individual may not have personally liked you (or vice versa)?

   13. Tell me about a difficult decision you’ve made in the last year?

   14. Some people consider themselves to be "big picture people" and others are "detail oriented". Which are you? Give an example of a time when you displayed this?

E. Sensory question
   15. Give an example of how you worked on a team?

   16. Give an example of how you set goals and achieve them?

   17. Give me an example of a time when you motivated others?

   18. Tell me about a time when you delegated a project/work responsibility effectively?

F. Background and demographics
   19. What is your educational background and are you currently furthering your education? If so, in what area?

   20. Number of years at CCCA?
APPENDIX E

FOCUS GROUP INTERVIEW QUESTIONS

Participant Name: _____________________________
Date of Interview: _____________________________

1. If you were interviewing candidates for this position as a TEACHER what would you be looking for in the applicants?

2. Tell me about a situation on which you had significant impact on because of your ability to follow-through?

3. Give an example of a time when you helped a staff member accept change and make the necessary adjustments to move forward?
   * What were the change/transition skills that you used?

4. Tell me about a situation in which you were able to find a new and better way of doing something significant?

5. Describe a situation when you demonstrated initiative and took action without waiting for direction? What was the outcome?

6. Sometimes the only way to resolve a defense or conflict is through negotiation and compromise. Tell about a time when you were able to resolve a difficult situation by finding some common ground?

7. Describe for me what you do to handle stressful situations?

8. What have you done to further your own professional development in the past 5 years?

9. When you have been made aware of, or have discovered for yourself, a problem in your work performance, what was your course of action? Can you give an example?

10. What do you consider to be your professional strengths? Give me a specific example using one of these characteristics in the workplace?