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Job Retention and Job Satisfaction at the Behavior Therapist Level Working in ABA Companies in the Home Setting

A Dissertation by

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Irvine, California
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Submitted in partial fulfillment of the requirements for the degree of

Doctor of Education in Organizational Leadership

March 2017

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Job Retention and Job Satisfaction at the Behavior Therapist Level Working in ABA Companies in the Home Setting

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ABSTRACT

Job Retention and Job Satisfaction at the Behavior Therapist Level Working in ABA Companies in the Home Setting

by Melissa M. Dauster

Purpose: The purpose of this relational study was to identify and compare the factors related to job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A second purpose of the study was to determine the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism. A further purpose of the study is to describe the improvements in the work place that behavior therapists working with students with autism identified as necessary to increase their job satisfaction and job retention.

Methodology: The survey used in this study was composed of four components. All participants completed (a) a demographic questionnaire, (b) the Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996) which was purchased, and (c) a 24-item survey developed by the researcher to identify intrinsic and extrinsic factors that influence job satisfaction, and (d) improvements that ABA Therapists perceived could improve their workplace job satisfaction and retention. The demographic information that was collected from the participants included the following information: age, gender, nationality and how many months they have been at their current company.

Findings: From the survey, 7 factors emerged as factors that affect job retention and job satisfaction at the BT level: Pay, Schedule, Support, Training, Benefits, Life Balance, and
Job Responsibilities. Training and Benefits were two common factors that were found throughout all four research questions. Pay, Schedule, Support, were found in research questions 1,2 and 4. Life Balance and Job Responsibilities were factors found in research questions 1,2 and 3. Demographic data that was also collected in the surveys was analyzed, and resulted in 74.23% of participants were female and 25.77% of participants were male. 54% of the participants have been employed with their current company for less than 12 months.
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CHAPTER I: INTRODUCTION

Autism Spectrum Disorder (ASD) diagnoses has been growing dramatically since the 1900s when the term autism was first recognized. Over 3.5 million people in the U.S. are diagnosed with autism today. As of 2014, 1 in every 68 children born is diagnosed with autism (Center for Disease and Control, 2014). The prevalence of autism in children in the U.S. has increased by 119.4% from 2000 (1 in 150) to 2010 (1 in 68) (CDC, 2014). Autism is the fastest-growing developmental disability. Due to the increasing prevalence rate of autism spectrum disorders, there is a heightened demand for therapy and accommodations in a variety of settings, including educational and clinical (Odom, Boyd, & Hall, 2009).

Autistic disorder is a pervasive developmental disorder (PDD), as classified by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) (American Psychiatric Association [APA], 2000). In order to qualify for a diagnosis of autistic disorder, an individual must meet a total of six or more criteria from three behavioral domains: (a) qualitative impairments in social interaction, (b) qualitative impairments in communication, and (c) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities. In addition to impairment in these domains, children with a diagnosis of ASD may engage in a variety of other behavioral excesses, including noncompliance, phobias, sleeping and eating disturbances, tantrums, aggression, and self-injury.

Applied Behavior Analysis (ABA) is one of the most widely practiced forms of intervention for autism spectrum disorders. ABA includes methodologies such as prompting, reinforcement, discrete trial teaching, has shown a positive impact on
individuals’ overall intellectual capabilities, adaptive behaviors, and most significantly their overall communication skills, with medium to large effect sizes over an extended period of time (Virués-Ortega, 2010). The studies focused on the use of ABA interventions have provided a significant amount of evidence of positive results in decreasing many impairments of autism (Steege, Mace, Perry, & Longnecker, 2007). Those that are receiving and implementing ABA therapy are in an intensive program, which can grow to 40 hours a week with up to 100 learning opportunities per hour. Each ABA program will vary in hours and program depending upon the child’s needs. Other characteristics of ABA interventions are one-on-one instruction with instructional objectives addressing core deficits, and emphasizing and allowing maximum generalizability of acquired skills into the natural environment (National Research Council, 2001) Over the life course of an individual’s ABA therapy, there is a need for constant monitoring, reassessment of goals, reassessment of skills attempted to acquire, and modification of teaching approaches and methods (Steege et al., 2007).

Behavior Technicians (BTs) are the employees that work directly, in the home setting, with the children diagnosed with autism. BTs have a background of never working with children on the autism spectrum or they have several years experience. As of 2014, the Behavior Analysis Certification Board (BACB) created a training for ABA companies to train BTs in a manner which supports them and gives them the information before they start working with children on the spectrum. This form of training is not mandatory for companies to implement but it is an acknowledgment of further support that is needed at the BT level.
BTs provide services to individuals with ASD due to the high demand of ABA services as a result of the extensive body of literature that has documented the successful use of this treatment approach for individuals with ASD and related disorders (Rogers & Vismara, 2008). Given the challenging nature of the BT position, it is not surprising that researchers have found that BTs self-report high levels of job stress and burnout and low levels of job satisfaction and personal accomplishment (Griffith, Barbakou, & Hastings, 2014; Hurt et al., 2013; Jennett, Harris, & Mesibov, 2003). These are factors that have been correlated with employee turnover in other professions (Billingsley, 2004). Therefore, this study seeks to gain a greater understanding of the factors that influence both BT turnover and satisfaction.

**Background**

Lovaas (1987) was the first to document the long-lasting effectiveness of ABA treatment on children with autism. He designed a research experiment based in part on the knowledge that autistic children do not seem to naturally learn from observing their environments as do typically developing children. Lovaas hypothesized that an individualized, comprehensive, and intensive learning environment based on the science of behavior analysis could be designed to teach children with autism the skills they do not naturally take in from their environments. Additionally, he hypothesized that this method could potentially “close the gap” between children diagnosed with autism and their typically developing peers.

Children in Lovaas’ study were placed either in a treatment group that received over 40 hours per week of intensive behavioral treatment or in a control group that received 10 or fewer hours per week of behavioral treatment. Treatment of the children
ranged from 2 to 4 years in duration. Results indicated that although there were no significant differences between the children of the experimental group and the control group at intake, over time the children in the experimental group scored significantly higher on measures of intelligence than did the children in the control group. Additionally, children in the experimental group were also placed in significantly less restrictive school environments. Of the 19 children in the treatment group, 9 had completed a first-grade placement for typically-developing children and scored in the average to above-average range on measures of intellectual functioning, while only 1 of the 19 children in the control group attained this level of functioning.

The author also included a second control group that did not receive intensive intervention, but were offered regular special education services. Posttest measures revealed no significant differences between the two control groups, suggesting that for ABA intervention to be effective on children with autism, it must be intensive. Additionally, although ABA has been shown to result in clinically significant gains for children with autism at a variety of ages and a variety of severity levels, Harris and Handleman (2000) found that children who enter treatment at a younger age and with a higher initial IQ are more likely to be placed in general education placements later in life.

Since the publication of the initial Lovaas study, several other studies have also documented the long-term effectiveness of ABA treatment for children with autism (McEachin, Smith, & Lovaas, 1993; Sallows & Graupner, 2005). Green, Brennan, and Fein (2002) documented the effectiveness of intensive behavioral intervention in a case study of a 1-year old toddler who was at risk of being diagnosed with autism. They found that with positive intervention, the child demonstrated no behavioral or
developmental abnormalities. Additionally, intensive ABA has been documented to be the most effective form of treatment for children with autism when compared to other types of treatment including less intensive ABA (Eldevik, Eikeseth, Jahr, & Smith, 2006), parent-directed models of service delivery (Bibby, Eikeseth, Martin, Mudford, & Reeves, 2002; Smith, Groen, & Wynn, 2000) and intensive eclectic intervention (Eikeseth, Smith, Jahr, & Eldevik, 2002, 2007). ABA therapy was also endorsed by the Surgeon General of the United States as the most effective and appropriate form of therapy for individuals with autism (U.S. Department of Health and Human Services, 1999).

In 2009, the National Autism Center published the National Standards Project, a consensus publication of empirically supported autism treatment authored by the world’s leading experts on autism and autism treatment. The results were a list of 11 types of treatment, all of which were rooted in ABA methodology, behavioral literature, or shown to be effective when used in conjunction with behavioral techniques.

Although the etiology of ASDs remains largely unknown, the empirically supported treatments for the disorder are rooted in Applied Behavior Analysis (ABA) and other variations of behavioral intervention (National Autism Center, 2009). ABA was defined by Cooper, Heron, and Heward (2007) as “the science in which tactics derived from the principles of behavior are applied to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change” (p. 20). ABA has been the treatment of choice for ASDs.
**Autism**

Autism Spectrum Disorder (ASD) is the clinical term for specific complex development disorders described in the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association (DSM-IV-TR, 2000) and the International Classification of Diseases (ICD-10; World Health Organization, 2007). Childhood autism is defined by: “(a) the presence of abnormal or impaired development that is manifest before the age of three years, and (b) the characteristic type of abnormal functioning in all the three areas of psychotherapy: reciprocal social interaction, communication, and restricted, stereotyped, repetitive behavior. In addition to these specific diagnostic features, a range of other nonspecific problems is common, such as phobias, sleeping and eating disturbances, temper tantrums, and (self-directed) aggression’ (World Health Organization, 2007). Applied Behavior Analysis focuses on principles explaining the way learning takes place, with positive reinforcement forming one of these principles. This study has shown that rewarding a certain behavior with a reinforcer or a motivator is most likely to repeat the behavior due to the reward.

Through research, behavior analysts have succeeded in developing many techniques which can increase the behaviors we want to see, and decrease those which can be harmful or can be interfering with learning. Therefore, applied behavior analysis is the process of using these principles and techniques to make a meaningful and a positive change to behavior (Lambe, 2007). Behavior analysis has been working with those young children who have autism and other related disorders since the 1960s. Since that time, ABA technicians have developed a variety of techniques that have been used in building skills and shaping behavior, which takes place from the time when the child is a
toddler until the child becomes an adult. These techniques have been structured to include classroom lessons or vocational skills, which are taught in the home setting. The techniques can be used in everyday situations like the playground or even family dinnertime. ABA therapy sessions can also involve one-on-one interactions where the participant interacts with the behavior technician, or the behavior technician is supporting the parent in his interactions with the child diagnosed with autism. Group instructions such as play dates have also been used and have proved to be useful in ABA sessions.

**Industry**

In 2001, the Indiana state legislature broke the growing impasse of the need for autism services and mandated that private insurers needed to offer their customers autism coverage. As of August 2015, twenty-nine more states have joined Indiana and mandated some kind of insurance coverage for children with autism, moving financial responsibility from school districts to insurance pools (http://butterflyeffects.com). This has changed the dynamics of the standards and regulations of ABA therapy in the home setting. As of 2014, the BACB board has recommended a new training that will meet the new standards required by insurance companies. The RBT (Registered Behavior Technician) recommends at least 40 hours of training before the BT is to enter the home. Behavior therapists also have to take a test in order to be registered with the BACB board. Due to these new regulations, it has changed how in-home ABA companies conduct their business and provide their services.

ABA companies are not required to provide the ABA training; however, it is becoming “highly recommended” for ABA companies to start implementing the RBT training. For example, Easter Seals, which is owned by Kaiser, is now requiring all
vendors who have contracts with Easter Seals to conduct RBT training with the vendor’s employees (Brianna Fitchett, personal conversation, 9/22/15). This shift has changed how ABA companies offer their services and how they hire employees.

**Applied Behavior Analysis (ABA)**

Although the etiology of ASDs remains largely unknown, the empirically supported treatments for the disorder are rooted in Applied Behavior Analysis (ABA) and other variations of behavioral intervention (National Autism Center, 2009). ABA was defined by Cooper, Heron, and Heward (2007) as “the science in which tactics derived from the principles of behavior are applied to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change” (p. 20). ABA has been the treatment of choice for ASDs.

Steege et. al (2007) has discussed the five main goals of ABA: (1) To teach new skills, which include social-communicational skills and life skills; (2) Prevention of loss of previously acquired skills; (3) To teach generalization of skills to other natural environments; (4) To restrict the ability of maladaptive behaviors and those that may interfere with the natural learning process; and (5) To identify those maladaptive behaviors and replace them with adaptive behaviors (Steege et al., 2007). Other characteristics of ABA interventions that are beneficial include the following: early intensive intervention, one-on-one instruction, instructional objectives addressing core deficits, emphasizing and allowing maximum generalizability of acquired skills into the natural environment (National Research Council, 2001).

The goal of ABA is to improve socially significant behaviors to a meaningful degree (Sulzer-Azaroff & Mayer, 1991). Socially significant behaviors may include
reading, academics, social skills, communication, and adaptive living skills. Adaptive living skills include gross and fine motor skills, eating and food preparation, toileting, dressing, personal self-care, domestic skills, time and punctuality, money and value, home and community orientation, and work skills. ABA focuses on the objective measurement of and a change in observable behavior, i.e., before and after intervention. Reliable measurement requires that behaviors are defined objectively (Sulzer-Azaroff & Mayer, 1991).

An ABA session can be defined as:

The instructor uses a variety of behavior analytic procedures, some of which are directed by the instructor and others initiated by the learner.

- Parents and/or other family members and caregivers receive training so they can support learning and skill practice throughout the day.
- The learner’s day is structured to provide many opportunities – both planned and naturally occurring - to acquire and practice skills in both structured and unstructured situations.
- The learner receives an abundance of positive reinforcement for demonstrating useful skills and socially appropriate behaviors. The emphasis is on positive social interactions and enjoyable learning.
- The learner receives no reinforcement for behaviors that pose harm or prevent learning. (www.autismspeaks.com).

ABA treatment schedules can range from mimicking an after-school tutoring schedule to being extremely intensive. A child receiving a full-time ABA schedule will typically have two to three therapy sessions per day, each ranging in length from 2 to 3
hours. Sessions are typically held 5 days a week, Monday through Friday, and children have regularly scheduled breaks between sessions, at which time they may nap, have a snack, or do other break-time activities. Sessions typically start at around 8:00 a.m. for one client and conclude around 7:30 p.m. after working with several different clients, creating a long workday for behavior therapists working full-time. Since children receiving ABA services are also frequently in school, there are often long gaps between therapy sessions, as ABA providers must work within the availabilities of multiple therapists and clients. Behavior therapists work often as on-call employees, which means they work when the family is available to have a session. As such, schedules for behavior therapists frequently change and therapists must be flexible with their availability in order to hold their positions (Langeliers, 2013).

A behavior therapist is supported in the home setting by a supervisor that has a Master’s degree or is a BCBA, Board Certified Behavior Analyst. When a behavior therapist is hired, it is not required for them to go through any training before they start services with a client in the home. In a study that Dillenburger and Keenan (2012) did in Ireland, one-third of the professionals surveyed had some training in ABA. The depth and level of this study was uncertain, however, it is likely that much of the training was delivered in non-accredited short courses, workshops, or conferences. Since at the time of the study, there were no accredited ABA courses at local universities (http://www.bacb.com), and typical psychology, social work, and education students receive at most one very general lecture about “behavioral approaches” (Dillenburger and Keenan, 2012). This finding reflects a substantial problem in much of the autism literature (Humphrey & Parkinson, 2006), which leads many professionals to view ABA
wrongly as only one specific treatment for autism rather than a science of behavior (Dillenburger & Keenan, 2009).

**Job satisfaction**

Although the present study will focus only on in-home services for autistic children, there are many autistic children in public school classrooms. Lack of motivation and self-efficacy in teachers of special needs children in the public schools are often the root cause of ineffective teaching of children with autism (Avranidis et al., 2000). Effectance Motivation Theory, sometimes referred to as mastery motivation (White, 1959), indicates that there is a link between motivation to engage in a difficult task and perceived confidence in one’s ability to perform the task. Mastery motivation theory is especially applicable to teachers of children with autism. General educators have consistently expressed misgivings about teaching children with autism due to feelings of inadequate preparation (Lambe, 2007).

Piko (2006) explored the relationships among burnout, role conflict, job satisfaction, and psychosocial health among health care workers at two major hospitals in Hungary and found that scores on all domains of burnout, especially emotional exhaustion, were significantly correlated with higher levels of job dissatisfaction. Additionally, experiences of role conflict were positively associated with emotional exhaustion and depersonalization. Finally, emotional exhaustion was found to be related to overall job withdrawal and turnover intention (Langeliers, 2013).

Langeliers (2013), who studied in-home ABA services for autistic children, found that intrinsic job satisfaction was the only significant predictor of all three subscales of burnout; emotional exhaustion, cynicism, and professional efficacy. This is not
surprising, as many of the theoretical definitions of burnout specifically relate to “a loss of enthusiasm, and a sense of mission in one’s work” (Cherniss, 1980, p. 16). Intrinsic job satisfaction was the only significant predictor of emotional exhaustion and perceived supervisor support. However, a majority of the hypothesized predictors for burnout were significant for professional efficacy: intrinsic job satisfaction, average amount of time spent traveling, average amount of time spent in the field, and perceived supervisor support were all significant predictors, in order of most to least significant.

Extrinsic job satisfaction relates to respect, fair treatment, being informed, the amount of supervision provided by supervisors, and opportunities to actively participate in the organization, and is in contrast with intrinsic satisfaction, which, as the name implies, is related to more intrinsic factors including self-esteem, personal growth and development, and achievement (Langeliers, 2013). Although the concept of reward, both financial and personal, has been hypothesized to play a part in the concept of burnout (Maslach & Leiter, 2008), it appears as though personal reward, or intrinsic satisfaction, may be the driving force behind the relationship between burnout and job satisfaction (Langeliers, 2013). Langeliers also discovered that all factors of burnout—exhaustion, professional efficacy, and cynicism—were significantly correlated with both intrinsic and extrinsic job satisfaction.

Employee retention

The cost of professional burnout to organizations is high: potential absenteeism, low employee morale, turnover, and impaired professional performance (Waugh & Judd, 2003). Therefore, research in the field has implications for administrative and human resources staff. Additionally, the cost of continually training new employees is high. An
estimate of the cost of training a new employee is $1189.42 (Center for Autism Related Disorders, 2012). As contributing factors to burnout are examined, organizations may attempt to implement policies and procedures that would promote protective factors in their employees. However, very little research has examined predictors of burnout and job satisfaction for behavior therapists who work in the home setting with children with autism. It is also notable that the variable of perceived organizational support may also be playing a role in an employee’s level of cynicism (DeConinck & Johnson, 2009).

There is widespread recognition that turnover may hinder effective and efficient delivery of services; however, there is limited research identifying factors that predict turnover for BTs who work with individuals with ASD. A study by Kazemi, Shapiro and Kavner in 2014 was done to determine variables that best predicted BTs’ turnover intentions. They found that about 38% of their participants reported they were highly or somewhat likely to leave their jobs, compared to about 17.9% of the total workforce (Boushey & Glynn, 2012). In the study, they also explained that approximately 38% of the variance in turnover intentions was based on participants’ self-reported satisfaction with their training, supervision, remuneration, and different aspects of their job (e.g., co-workers and working conditions). The variables that were identified as predictors of turnover for BTs are similar to what Boushey & Glynn (2012) reported in special education teachers, social workers, and residential staff. However, they found that some factors identified as predictors of turnover in other human service professions, for example employee characteristics (e.g., age, level of education), consumer characteristics (age, severity of disability), and certain agency characteristics (e.g., context in which
services were provided, actual amount earned per hour, receipt of benefits) did not predict turnover intent, and pay accounted for 20.8% of the variance.

**Statement of the Research Problem**

With autism being the fastest growing developmental disability, the demand for Applied Behavior Analysis (ABA) to provide services in the home for children with special needs has grown rapidly. Lovaas (1987) was the first person to document the long-lasting effectiveness of ABA treatment for children diagnosed with autism. ABA has been documented to be one of the most effective forms of treatment for children with autism (Eldervik, Eikeseth, Jahr, & Smith, 2006). ABA therapy was also endorsed by the Surgeon General of the United States as the most effective and appropriate form of therapy for individuals with autism (U.S. Department of Health and Human Services, 1999). Since then, ABA has been shown to result in clinically significant gains for children with autism at a variety of ages and a variety of severity levels. Harris and Handleman (2000) found that children who enter treatment at a younger age, during early intervention, and with a higher initial IQ are more likely to be placed in general education instead of special day class placement later in life.

ABA companies throughout the United States and around the world provide the delivery of ABA services to children diagnosed with autism. For every one child diagnosed with autism, ABA companies must find one employee to work with that child in a one-to-one home setting. There are many difficulties that arise with finding a BT who is qualified and reliable to work with the individual client. Behavior technicians usually provide in-home, one-to-one treatment, up to 30 hours a week (Grindle, Kovshoff, Hastings, & Remington, 2009). Parents reported difficulty with the reliability
of these therapists, and it was challenging to find a BT that could connect with their child.
The quality of the therapy relies heavily on the behavior therapists.

The BACB Board defines a Behavior Therapist as follows:

The Registered Behavior Technician™ (RBT™) is a paraprofessional who
practices under the close, ongoing supervision of a BCBA. The RBT is primarily
responsible for the direct implementation of behavior-analytic services. The RBT
does not design intervention or assessment plans. It is the responsibility of the
RBT supervisor to determine which tasks an RBT may perform as a function of
his or her training, experience, and competence. The BACB certificant
supervising the RBT is responsible for the work performed by the RBT on the
cases they are overseeing (www.bacb.com). *

*This definition is derived from the BACB website. Moving forward, the title RBT™
will be labeled as BT since that is the common terminology used in the industry.

Although there are similarities in roles and responsibilities between BTs and the
aforementioned professions (e.g., working with at-risk populations), research gaps remain
regarding the factors influencing their job satisfaction and turnover. When a BT leaves a
company, there is a disruption in the continuity of services and the quality of service may
negatively impact the client’s progress (Hatton et al., 2001; Hurt, Grist, Malesky, &
McCord, 2013; Powell & York, 1992) or the quality of family dynamics (Grindle,
major factors that are affected when a BT leaves a company: the organizational costs, the
indirect costs during the transition period that affect the workload, morale, and
productivity of the remaining employees, as well as the satisfaction from the customer,
the family. Lastly, there are costs of lost opportunities. The time and energy that is invested in each new employee results in lost opportunities to create and sustain other aspects of the company (Ghere & York-Barr, 2007). This also affects the parent’s trust in the system that they are depending upon to help their child.

The problem, therefore, is that the continuity and quality of therapeutic services are affected by the turnover of BTs employed in the ABA industry. A need exists to understand the factors influencing the job satisfaction and continuing employment of BTs serving the needs of ASD children and parents. This study will examine the factors that affect the turnover rate of BTs, and examine whether job satisfaction variables influenced the turnover intentions of BTs.

**Purpose Statement**

The purpose of this relational study was to identify and compare the factors related to job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A second purpose of the study was to determine the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism. A further purpose of the study is to describe the improvements in the work place that behavior therapists working with students with autism identified as necessary to increase their job satisfaction and job retention.

**Research Questions**

1. What factors do behavior therapists working with students with autism identify as important regarding job satisfaction and job retention?
2. What supports and barriers do behavior therapists working with students with autism experience that affects their job satisfaction and job retention?

3. What improvements to the work place do behavior therapists working with students with autism identify as necessary to improve job satisfaction and job retention.

Significance of the Problem

Prior to the 1980s, the Department of Developmental Services (DDS) reported 200 or fewer autism cases in the state of California. As of 2014, the number is nearing 5,000 such births per year feeding into the DDS system, which is a 25-fold increase over birth rates three decades ago (Autism Society, 2015). The greater Bay Area experienced a more than 15-fold increase in autism diagnoses between 1900 and 2014. The Bay Area is now home to over 12,000 autism cases, up from 754 in 1990. Since the 1980s when Lovaas and Koegel developed the term autism, ABA in home companies have expanded at a very rapid rate to keep up with the demand for services for children diagnosed with autism. Research on behavioral treatment of autistic children has become increasingly sophisticated and encompassing, and interventions based upon ABA have consistently resulted in positive behavioral outcomes. ABA has now been categorized as one of the fourteen established interventions that have been thoroughly researched and have sufficient evidence to use that is effective (National Autism Center, 2015).

Research shows that well prepared, capable employees have the largest impact on learning (Darling-Hammond 2000; Wilson, Floden & Ferrini-Mundy, 2001). However, there are not enough special education professionals to fill the vacancies. By the year 2010, over 600,000 special educators were needed (Bureau of Labor Statistics, 2003).
Universities and colleges in the United States prepare approximately one half of the number needed annually to fill these positions (Kozleski, Mainzer, & Deshler, 2000). This problem extends even deeper by the fact that almost 40% of graduates of special education programs do not actually enter the special education field following their graduation (Boe, Cook, Paulsen, Barkanic, & Leow, 1999).

Employment retention in any organization is vital for the performance of the organization. Retaining employees means retaining very important skills and expertise in the organization. Many organizations are now realizing the importance of ensuring they retain their employees by ensuring that they are satisfied with their job (Cardy & Lengnick-Hall, 2011). Job satisfaction for any employee entails many aspects ranging from the remunerations aspects to the conditions and terms of employment.

Idris (2014) asserts that, when an organization loses an employee, it cost the organization, a lot to recruit another employee. One study estimated that it costs a school district to hire a new teacher $8,000 per recruit who leaves within the first three years (Texas Center for Educational Research, 2000). This is particularly discouraging as this money could be better used for instruction and resources that directly impact student learning. In addition, it takes time for the new employee to gain the expertise of the employee being replaced. Therefore, companies opt to ensure they retain employees in their organization by making the employee feel satisfied when performing his or her job.

Consistency for children diagnosed with autism is key to increasing their cognitive and behavioral skill set and to be able to generalize those skills throughout their lives. In order to provide the consistency children with autism need, there needs to be a better understanding of how to maintain employee satisfaction and employee retention
within the company. The fact that a lack of job satisfaction has been linked to attrition among special educators (Platt & Olson, 1990; Seery, 1990), makes it an important variable to investigate in the context of employee attrition.

**Definitions**

**Autism** - a mental condition, present from early childhood, characterized by difficulty in communicating and forming relationships with other people and in using language and abstract concepts.

**ABA** - the process of systematically applying interventions based upon the principles of learning theory to improve socially significant behaviors to a meaningful degree, and to demonstrate that the interventions employed are responsible for the improvement in behavior.

**ABA Sessions** - Where a BT works directly with the child diagnosed with autism in the home setting in collaboration with the parents and the clinical team.

**BCBA** - Board Certified Behavior Analyst

**Behavior Therapist** - The person who implements ABA therapy in the home setting, working directly with the child diagnosed with autism.

**Benefits** - medical, dental, vision plans as well as sick and vacation time.

**Burnout** - physical or mental collapse caused by overwork or stress.

**Discrete Trial Training (DTT)** - is a method of teaching in simplified and structured steps. Instead of teaching an entire skill in one go, the skill is broken down and “built-up” using discrete trials that teach each step one at a time.

**Employee turnover** - the ratio of the number of workers that had to be replaced in a given time period to the average number of workers.
**Extrinsic Factors** - factors external to the individual and unrelated to the task they are performing.

**Intrinsic Factors** - internal desires to perform a particular task, people do certain activities because it gives them pleasure, develops a particular skill, or it is morally the right thing to do.

**Job retention (employee retention)** - the ability of an organization to retain its employees.

**Job Satisfaction (employee satisfaction)** - the extent to which a person's hopes, desires, and expectations about the employment he is engaged in are fulfilled.

**Life/Work Balance** - is a concept including proper prioritizing between "work" (career and ambition) and "lifestyle" (health, pleasure, leisure, family and spiritual development/meditation).

**Motivation** - the reason or reasons one has for acting or behaving in a particular way.

**Paraprofessional** - a person trained to assist a doctor, lawyer, teacher, or other professional, but not licensed to practice in the profession.

**Pay** - satisfaction with pay and pay raises.

**RBT** - Registered Behavior Technician is a certification for Behavior Therapists to receive through a 40-hour training which is outlined by the BACB board.

**Schedule** - more or less hours, canceled sessions, or flexibility with hours.

**Social Skills** - skills that allow a person to interact and to act appropriately in given social contexts. The skills include assertiveness, coping, communication, and friendship-making skills.
Supervisor/Admin Support - communication and support given from the direct supervisor and administrators within the company.

Training - initial training, ongoing training once Behavior Therapists are in the field.

Vocational - relating to, providing, or undergoing training in a special skill to be pursued in a trade.

Work environment - location where work is completed. The physical location and its surroundings, such as an office building, cubicle, or home.

Workplace - a place where people work, such as an office or factory.

Delimitations

This study will focus on the perspective of the BT. It will not represent the perspective of the agency and the factors the agency feels influence employee retention and satisfaction. Companies with less than 50 BTs employed will also not be represented in this study. While this qualitative research will encompass the BT’s perspective, it will not represent the BT’s perspective in a company with 50 or less BTs employed. A limitation of the survey used in this study would be the lack of open-ended questions, which may not lead to the discovery of topics and other themes that may be important to job retention and employee satisfaction.

Organization of the Study

The remainder of the study is organized into four chapters, a bibliography, and appendixes. Chapter II presents a review of what is known about the elements of autism, the history of ABA and the industry, previous research on job retention and job satisfaction from similar industries, and the limited research that has been done from the
BT perspective. Chapter III explains the methodology and research design of the study. This chapter includes an explanation of the population, the sample, and data gathering procedures, as well as the procedures used to analyze the data collected. Chapter IV presents, analyzes, and provides a discussion of the findings of the study derived from the survey. Chapter V contains the summary, findings, conclusions, and recommendations for actions and further research.
CHAPTER II: REVIEW OF THE LITERATURE

In this chapter, the existing literature is reviewed on topics related to this research study. Autism, ABA, Behavior Therapists, employee retention, employee satisfaction, and the ABA industry will all be examined and reported with evidence supporting this study. Furthermore, evidence of how the ABA industry is changing with new regulations and new laws will be reported.

Although autism has become well known and widely researched, the exact cause or causes of autism remain a mystery. Individuals with autism have difficulty in expressing their own feelings, significant deficits in socializing with others, and in identifying and understanding the social cues of others (Barbera, 2003; Linder, 1993). The Center for Disease Control and Prevention (CDC, 2015) has reported that autistic spectrum disorders are a neurological condition, but scientists still don’t have an understanding of what is causing it. It is suggested that a genetic predisposition and/or environmental factors might contribute to the disorder (Barbera, 2003). The CDC has reported that early identification has become more common due to the increase of knowledge and awareness of autism in the community. Figure 1 below represents the growth in autism diagnosis over the years.
Autism

Children on the autism spectrum have been recognized since the 1900s. The Swiss psychiatrist Eughen Bleuler, who originated the word schizophrenia, first used the term ‘autism’ in 1911, and defined it as the loss of contact with the reality of the world, which can lead to difficulty with communication or the inability to communicate at all (Gadia, Tuchman, & Rotta, 2004). The Greek word "autós" meant self and the word “autism” was used by Bleuler to mean morbid self-admiration and withdrawal in self. The term “autism” was used by Blueler to describe schizophrenics who appeared to be turned inward or towards themselves and had difficulty relating to people on a social level (Pearson, 2008).

Figure 1. Autism Growth Over the Years

*CDC website, accessed 2015
Between 1938-1943, Leo Kanner noticed children that may fit an “autism” category. He studied eleven children who demonstrated extreme aloneness and were labeled as disturbed or mentally retarded, but he re-categorized them as early infantile autism (Gadia, Tuchman & Rotta, 2004). The typical difficulties that Kanner observed in these children were language abnormalities, social skill deficits, and unusual behavior patterns that showed a tendency to preserve the environment (Matson & Minshawi, 2006). These behaviors were often compared to childhood schizophrenia, but the age of onset, family history, and intelligence level were thought to distinguish between the two disorders. Kanner believed that children with autism were born without an innate ability to develop normal affective contact with other people. He suggested that the parents of these children were very much career-oriented and intelligent but were socially awkward, and displayed little affection toward their children (Matson & Minshawi, 2006; Gadia, Tuchman & Rotta, 2004). Kanner suggested that the parents’ child-rearing practices directly correlated with their children’s developing autism. These beliefs became causal explanations of autism in the 1960s (Gadia, Tuchman, & Rotta, 2004; Linder, 1993). Further etiological factors, including stimulus deprivation, parental personality disorder, and some interaction between the biology and the experiences of the child were also considered (Linder, 1993, Matson & Minshawi, 2006).

In 1961, Ferster theorized how the role of parents as mediators of reinforcement could be a potential cause of autistic behavior. These speculations by Ferster were not found to be valid, but his beliefs did contribute to the initiation of behavioral analytic research leading to data-based interventions for autism. Behavioral analytic principles attempted to address the learning needs of children through the use of social
reinforcement (i.e., tokens provided to elicit a behavior response) (Gadia, Tuchman, & Rotta, 2004). This research was very influential in the development of therapeutic interventions, such as Ivar Lovaas’ work with applied behavior analysis (Volkmar & Cohen, 1997).

There is a growing trend in the prevalence of children with Autism Spectrum Disorder (ASD). According to the CDC (2009), from 1998 to 2007 the number of 6- to 21-year-old children diagnosed as autistic and receiving services, as in public special education programs, increased five-fold from 54,064 to 258,305. More children are being diagnosed due to an increase in professional and parental awareness, improved diagnosis tools in screening and identification, and the growth of professional organizations, such as in-home services, and advocating services for children with ASD (Wings & Potter, 2002).

In the DSM-5, the autism diagnosis has changed significantly. Instead of autism being classified by four diagnoses: autistic disorder, Asperger’s disorder, childhood disintegrative disorder, or the catchall diagnosis of pervasive developmental disorder not otherwise specified, the DSM-5 now has one broad category called Autism Spectrum Disorder (ASD). Researchers and autism centers found that the separate diagnoses were not applied consistently across different diagnostic centers, clinic centers, or treatment centers. (DSM-5) Anyone that was diagnosed under the four categories listed above still fit the criteria of the autism diagnosis under the new 2 Core Definitions instead of 3 as listed in the DSM-IV: (1) Deficits in social communication and social interaction (2) Restricted, repetitive patterns of behavior, interests, or activities. An ASD diagnosis requires evidence of both. Huerta et al., in the October 2012 issue of the American
Journal of Psychiatry, conducted the most comprehensive assessment of the DSM-5 criteria for ASD based on symptom extraction from previously collected data. The DSM-5 criteria identified 91 percent of children with clinical DSM-IV Pervasive Development Disorder (PDD) diagnoses, suggesting that most children with DSM-IV PDD diagnoses will continue their diagnosis of ASD using the new criteria (Huerta et al., 2012).

The M.I.N.D Institute (Medical Investigation of Neurodevelopmental Disorders) has studied the cause of autism, including over 200 children who participated in the first phase of the M.I.N.D. study between 2003 and 2008. They reported several important results:

- Previous estimates of second child autism risk, based on data from the 1980s, were 3–5%. Their data (and that of others across the country) suggest that the risk may be as much as four times higher than initially thought, i.e., between 15% and 20%.
- Up to a third of younger siblings of children with autism may have speech delays and other communication delays, such as later pointing, although they do not develop autism.
- Two red flags for autism as young as 12 months of age are failure to respond consistently to name and unusual use of objects, such as staring at them for prolonged periods, rotating them, or spinning them.
- Surprisingly, very few children who develop autism are identifiable at 6 months of age. In their study, most of these infants engage warmly with others, smile at people, vocalize to others, and make good eye contact at 6 months. However, these skills decreased between 6 and 18 months as signs of autism
slowly emerged. Their current focus is on trying to discover risk markers at six months of age that might predict which children will begin to show this decline into autism. (http://www.ucdmc.ucdavis.edu/mindinstitute/research/infantsib/findings.html)

**Applied Behavior Analysis**

The use of ABA methods as an intervention for children with autism in the form of (early) intensive behavioral intervention (Lovaas, 1987) has developed a strong evidence base. Recently, Rogers and Vismara (2008) concluded that intensive behavioral intervention has created sufficient supporting data for it to be identified as a “well-established” empirically supported intervention. When compared against eclectic autism-specific interventions of similar intensity, intensive behavior intervention has been shown to lead to more positive effects on the cognitive performance, adaptive behaviors, language, and autism symptoms of young children with autism (Eikeseth et al., 2002; Magiati et al., 2007; Zachor et al., 2007). Over 30 years of research and peer review of applied behavior analysis’ effectiveness for individuals with autism demonstrates ABA has been as effective based upon the scope and quality of science.

The goal of ABA is to improve socially significant behaviors to a meaningful degree (Sulzer-Azaroff & Mayer, 1991). These researchers came to this conclusion after an extensive review of DeMeyer, Hingtgen & Jackson (1982). They concluded “...the overwhelming evidence strongly suggest that the treatment of choice for maximal expansion of the autistic child’s behavioral repertoire is a systematic behavioral education program, involving as many child contact hours as possible, and using
therapists (including parents) who have been trained in the behavioral techniques” (p.435).

Socially significant behaviors may include reading, academics, social skills, communication, and adaptive living skills. Adaptive living skills include gross and fine motor skills, eating and food preparation, toileting, dressing, personal self-care, domestic skills, time and punctuality, money and value, home and community orientation, and work skills. ABA focuses on the objective measurement of and change in observable behavior, i.e., before and after intervention. Reliable measurement requires that behaviors be defined objectively (Sulzer-Azaroff & Mayer, 1991).

For children with autism, ABA methods are used to: Increase behaviors (e.g., reinforcement procedures increase on-task behavior, or social interactions); teach new skills (e.g., systematic instruction and reinforcement procedures teach functional life skills, communication skills, or social skills); maintain behaviors (e.g., teaching self-control and self-monitoring procedures to maintain and generalize job-related social skills); generalize or transfer behavior from one situation or response to another (e.g., from completing assignments in the resource room to performing as well in the mainstream classroom); restrict or narrow conditions under which interfering behaviors occur (e.g., modifying the learning environment); and reduce interfering behaviors (e.g., self-injury or stereotypy) (Main Administrators of Services for Children with Disabilities MADSEC, 2000).

According to the CDC Autism Fact Sheet (2010), the main research-based treatment for autistic spectrum disorders is intensive, structured teaching of skills, commonly known as behavioral interventions. There are several components that must
be addressed when providing an educational program well-suited to the needs of an individual child diagnosed with autism, including individualized supports and services, systematic instruction, comprehensive and structured learning environments, specialized curriculum focus, a functional approach to problem behavior, and family involvement (Iovannone, Dunlap, Huber & Kincaid, 2003). Furthermore, it was stated that Individual with Disabilities Education Act (IDEA), supports the theory of Positive Behavioral Interventions and Supports (PBS). Positive Behavioral Interventions and Supports reward desirable behaviors and take rewards away when undesirable behaviors are exhibited (Rutherford, Wilcox, & Stowe, 2002). The social skills interventions used with children diagnosed with autism are considered a form of positive behavior intervention and support.

Dillenburger, Keenan, Gallagher, & McElhinney (2004) examined parents’ responses to the use of applied behavior analysis with their children. Their findings confirmed a high level of perceived effectiveness of applied behavior analysis. The parents felt that applied behavior analysis was effective in terms of attaining behavioral goals, creating strong intervention strategies, and improving the overall quality of life for their children. The quality of the training provided to educational staff using the applied behavior analysis techniques was critical; the study found that college-educated therapists were more successful with applied behavior analysis when compared with parent-employed therapists who had received short-term training. Last, this study showed that the age of the child and the onset of treatment is an important factor in the success rate.
**Discrete Trial Training**

Discrete Trial Training (DTT) is one of the ABA techniques used to work with children diagnosed with autism. Discrete trials are defined as a discrete opportunity for occurrence of a behavior. A trial is operationally defined by its three behavioral components: an antecedent stimulus, a response, and a stimulus (Reed, Osborne, & Corness, 2006). The delivery of the antecedent stimulus marks the beginning of the trial, and the delivery of the stimulus signifies the termination of the trial. Applied Behavior Analysis yields positive outcomes with children diagnosed with autistic spectrum disorders by enhancing their life skills (Reed, Osborne, & Corness, 2006). The Discrete Trial Training allows for continuous opportunities for trial/error learning. It is teacher-controlled (the teacher determines the sequence of instruction and material taught); the student requires minimal thinking; and it is easy to collect and evaluate data related to program implementation (Simpson, 2005; Hernandez, 2008).

The Discrete Trial Training method has several advantages. The most important is the five-step instructional procedure that is used to teach young children a wide range of skills. It has been particularly effective in teaching children with autism new behaviors and skills (Downs et al., 2007). The five instructional steps include: the discriminative stimulus, which is the instructional or environmental cue to which the teacher would like the child to respond; the prompting stimulus, a prompt or cue from the teacher; the response, the skill or behavior that is the target of instruction; the reinforcing stimulus, which is the reward designed to motivate the child to respond correctly; and the inter-trial interval, which is a brief pause between consecutive trials (Downs et al., 2007). Downs (2007) also reports that DTT is an effective instructional method that can be used
to teach autistic children how to generalize trained skills through the use of imitation, receptive language, expressive language, and conversational skills. Furthermore, DTT procedures are adaptable to individualized, developmentally appropriate education plans and facilitate ongoing data collection that allows for a continuous formative assessment of student progress. Downs, A., Downs, R. C., Johansen, M., & Fossum, M (2007) and Cowan (2007) indicated that although it typically thought of occurring outside of students’ typical routines, DTT instruction can be included with the daily activities of the student.

In their study in 2007, Downs, Downs, Johansen and Fossum investigated the effectiveness of providing DTT instruction to children with autism in a public-school setting. The effects of providing DTT on the participants’ cognitive, language, behavioral and social functioning were evaluated. Results showed positive changes in adaptive behavior development and social emotional functioning for students who received DTT. Furthermore, Smith (2001) found that DTT is an effective method of teaching children with autism. These children rarely exhibit personally and socially desirable behaviors to which reinforcements can be applied while they are engaged in behaviors that interfere with teaching and learning. To eliminate these behaviors and teach appropriate and desirable behaviors, it is imperative to create highly controlled and carefully monitored teaching environments. The DTT method can be used with young children in the early stages of development to improve such behaviors as attending, imitating, following instructions, and answering questions (Anderson, Taras, & Cannon, 1996).
Pivotal Response Training

Pivotal Response Training (PRT) emphasizes responses to multiple cues and improved motivation. (http://education.ucsb.edu/autism, 2015) This technique instills the foundation to elicit appropriate responses to questions asked of individuals with ASD. This method was used on two adolescents with autism, and produced positive outcomes in communication and social behavior that generalized beyond the immediate treatment setting (Cohen & Volkmar, 1997). It is important in the PRT system to teach individuals with ASD to establish multiple means of communication so that they learn ways to make requests and interact appropriately. As with gestures, one must provide clearly visible models by being at an individual’s physical level, encouraging face-to-face eye contact, and producing words slowly, clearly, and repetitively. Specific speech repetition enhances the training and usage of the words. There are several methods that can be used to reinforce positive social interaction, including using imitation of an individual’s vocalizations and modifying them in playful turn taking; using short relevant phrases and intonation patterns; using stereotypic and ritualized utterances in routines; modeling short utterances; and singing songs or reciting rhymes that have slots for filling in words or sounds. Using appropriate modeling and opportunities to vocalize and imitate sounds and gestures can be beneficial for autistic individuals who are verbal.

In summary, ABA describes human behavior in observable measures and reinforcement is an important part of this approach. ABA must be conducted in a highly structured environment in which opportunity for data collection is permissible. Both Discrete Trial Training and Pivotal Response Training are variations of ABA that can have positive effects when implemented appropriately. There has been debate over the
effectiveness of ABA and its various approaches. Some speculate that there is not enough research to support these approaches and that generalization of the trained skills is weak. Despite the criticism, ABA has become a widely known technique, improving the ability of school districts to identify and better serve the needs of children diagnosed with autism.

Behavior Therapists

Registered Behavior Technicians: “An RBT is a paraprofessional who practices under the supervision of a BCBA or BCaBA. The RBT’s primary responsibility is the direct implementation of treatment plans developed by the supervisor.”


The RBT credential represents a higher standard of service to the autism community. RBTs have more knowledge about the industry, better trained, and more reputable in the field of autism. In 2013, the BACB board announced that it was developing a training program specifically designed for the Behavior Therapists who worked in in-home ABA companies (BACB newsletter, 2013). In recent years, the number of behavior technicians has grown along with the demand for quality applied behavior-analytic services. This growth, along with requests to identify and evaluate standards for behavior technicians by regulatory and funding stakeholders, firmly establishes the need for the new credential (BACB, 2013). The RBT standards were developed using established practices from the credentialing industry of the BCBA and the BCaBA.

The RBT Task List serves as the curriculum for the training required by all candidates for the RBT credential. The training requirements are as follows:
• The training must cover all of the tasks and subtasks in the RBT Task List and the Guidelines for Responsible Conduct for Behavior Analysts that have been designated as being relevant for behavior technicians.

• The cumulative duration of training must be at least 40 hours (but may be offered in briefer units).

• At least 3 hours of the training must be devoted to ethics and professional conduct.

• The training may be conducted in person or online.

• The training may be didactic (e.g., lecture-based) or experiential (e.g., role-playing) in nature.

• The training must be completed within a 90-day period.

• The training must be conducted by a BCBA or BCaBA (BACB.com, 2016).

This new training standard was developed for Behavior Therapists, the paraprofessionals who provide the direct treatment to children diagnosed with autism. The growth in the number of children being diagnosed with autism along with the demand for quality applied behavior-analytic services established a need for a training program for Behavior Therapists. The RBT credential provides the training necessary for the duties of the Behavior Therapist (Dr. Carr, personal interview, 2015). Behavior Therapists are responsible for implementing, not designing, the behavior plans designed by their supervisors. RBT is not a required training for companies to implement; however, it is highly recommended.
**ABA Sessions**

Based on the research thus far, a balanced and inclusive approach to treatment selection should be grounded in parental participation by reason of ultimately parents are responsible for lifetime care of their children with ASD (Dillenburger & McKerr, 2009). Plyles (2004) addressed another concern for children with ASD: the effect it has on the parents. Parents of the children struggle with (a) feeling the need to train teachers every year about ASDs and their children, (b) handling dietary restrictions and (c) finding themselves being called into school often when there are behavior problems and need to take their child home. The parents are taught some of the techniques of the applied behavior analysis in order to assist the behavior technicians with their job. The ABA sessions are aimed at making the parent able to take an active role in monitoring the child’s progress (Noguchi, Kawano & Yamanaka, 2013). The parent coaching can provide an opportunity to ensure results for the children, which are consistent due to the efforts of the parent in the treatment of the child. In addition, it leads to treatment integrity and general promotion of the vital life skills of the child. It is clear that caregivers, especially parents, are the primary and the most important therapists in the life of a child.

An ABA session consists of:

- A qualified and trained Board Certified Behavior Analyst (BCBA) designs and directly oversees the intervention.
- The analyst’s development of treatment goals stems from a detailed assessment of each learner's skills and preferences and may also include family goals.
- Treatment goals and instruction are developmentally appropriate and target a broad range of skill areas such as communication, sociability, self-care, play and leisure, motor development, and academic skills.
- Goals emphasize skills that will enable learners to become independent and successful in both the short and long terms.
- The instruction plan breaks down desired skills into manageable steps to be taught from the simplest (e.g., imitating single sounds) to the more complex (e.g., carrying on a conversation).
- The intervention involves ongoing objective measurement of the learner’s progress.
- The behavior analyst frequently reviews information on the learner’s progress and uses this to adjust procedures and goals as needed.
- The analyst meets regularly with family members and program staff to plan ahead, review progress, and make adjustments as needed.
- The instructor uses a variety of behavior analytic procedures, some of which are directed by the instructor and others initiated by the learner.
- Parents and/or other family members and caregivers receive training so they can support learning and skill practice throughout the day.
- The learner’s day is structured to provide many opportunities – both planned and naturally occurring - to acquire and practice skills in both structured and unstructured situations.
• The learner receives an abundance of positive reinforcement for demonstrating useful skills and socially appropriate behaviors. The emphasis is on positive social interactions and enjoyable learning.

• The learner receives no reinforcement for behaviors that pose harm or prevent learning (www.autismspeaks.com, date?)

During these ABA sessions, parents must be heavily involved in participation and implementation of the programs the BTs are running. Given the multiple significant roles that families play in the lives of their children and the fact that parents continue to be primary caregivers for individuals with ASD will into adulthood (Marker, Mailllick, & Smith, in press; Seltzer et al., 2011), it is paramount that educators involve families in the transition planning process to promote positive transition outcomes for students (Kohler & Field, 2003). However, many families find interacting with educators stressful (Bezdek, Summers & Turnbull, 2010; Fish, 2006) and would like to be more engaged in the planning process (Wagner, Newman, Cameto, Javiz, & Valdes, 2012) Working in the home providing ABA services provides a collaborative environment for a child with ASD between the educators and the parents. Parental expectations and involvement in education is strongly predictive of children’s academic achievement (Fan & Chen, 2001; Hill & Tyson, 2009; Spera, 2005). Parental acceptance and support for independence of adolescent children on the spectrum has been associated with higher levels of self-esteem and better adult relationships following the high school exit (Khaleque & Rohner, 2012). ABA services are provided for 2-3 years in the home setting so eventually the parents need to take over with the strategies and implementation that in-home ABA services provide.
Raising a child with ASD is a very difficult task. In a large population-based study, mothers of children with ASD reported higher levels of parenting stress as well as higher rates of mental health problems compared with mothers of children without disabilities (Montes & Halterman, 2006). Several studies have also shown that parents of children with ASD report greater negative impact of having a child with a disability and poorer well-being in comparison with parents of children with other developmental disorders including Down syndrome, fragile X syndrome, cerebral palsy, and undifferentiated developmental disability (Blacher & McIntyre, 2006; Eisenhower, Baker, & Blacher, 2005). The majority of studies have consistently found that challenging behavior problems are among the most significant sources of stress for families (Hastings et al., 2005; Herring et al., 2006; Lounds, Seltzer, Greenberg, & Shattuck, 2007), highlighting how educational interventions to address child behavior likely will have cascading benefits for family life and parent stress. The stress of parenting a child with ASD is associated with comprised physical health symptoms; mothers of adolescents and adults with ASD had higher levels of fatigue, gastrointestinal (GI) problems, and headaches compared with mothers of similarly aged children without disabilities (Smith, Seltzer, & Greenberg, 2012). It is important to highlight that not all parents experience compromised health and well-being in response to the stresses associated with caring for their child with ASD (Barker et al., 2014). Factors that contribute to adaptation in the face of stress for parents of adolescents with ASD include the presence of social supports (Boyd, 2002; Smith, Greenberg, & Seltzer, 2012), the use of problem-focused coping strategies (Smith et al., 2008), high levels of family adaptability (Baker, Seltzer, & Greenberg, 2011) and age-related improvements in the
child in behavior problems (Barker et al., 2010; Lounds et al., 2007). Successful programming to support families as they support their children needs to involve everyone involved in that child’s life.

**ABA Industry**

*Regional Center of the East Bay.* The Regional Center of the East Bay is a private, non-profit corporation under contract with the California Department of Developmental Services. In 1966, the first two regional centers were piloted in California. In 1969, the Lanterman Mental Retardation Act established the regional center system, which today includes twenty-one regional centers throughout California. In 1973, the Lanterman Mental Retardation Act was expanded to include people with cerebral palsy, epilepsy, autism, and other conditions closely related to mental retardation. In 1976, the legislation was renamed the Lanterman Developmental Disabilities Services Act (a.k.a the Lanterman Act) and amended to establish the right to treatment and habilitation services and individualized program planning. In 2014, the law changed “mental retardation” to intellectual disability.

Children diagnosed with autism that are receiving Behavioral Health Treatment (BHT) services through the Regional Center prior to September 15, 2014 will continue to receive services funded by the center, until the transition begins for medical insurance to take over the funding (Department of Health Care Services (DHCS), 2015). Beginning on February 1, 2016 the authorization payment of BHT services will transition from the Regional Centers to the Medi-Cal managed care health plans (MCPs) over an estimated six-month period, according to the number of children receiving services in the MCP’s county or counties (DHCS, 2015).
Insurance Coverage

Currently, a total of thirty-seven states and the District of Columbia have laws related to autism and insurance coverage, which require insurers to provide coverage for the treatment of autism. Other states may require limited coverage for autism under mental health coverage or other laws. During the 2007-2008 legislative session, the first nine states passed legislation related to autism and insurance coverage (www.ncsl.org). In 2011, California enacted legislation requiring insurance coverage for autism spectrum disorders. The Senate Bill 946 (SB 946), the Autism Insurance Reform Bill, was passed in recognition that autism services should be treated as a medical treatment (www.legislature.ca.gov). It impacts thousands of families with children with autism spectrum and related disorders by giving them access to behavioral intervention treatments for their children that they would not otherwise receive. This bill also impacts State General Fund spending for those services in the budgets of the Department of Developmental Services, through the 21 non-profit regional centers. This will have a positive impact on the funding of Regional Centers due to funding going to other services needed for children and adults with special needs (Meredith Akers, interview, December 2015).

Medical insurance is now in charge of funding the services instead of the state. The SB 946 bill took effect July 2012, which has now shaped how autism services are being implemented. Insurance companies such as Kaiser and Anthem are requiring certain certifications such as CPR, a degree from an accredited college, and a certain amount of training for the employees with the companies they are contracted with. Kaiser is recommending all employees that work with their clients receiving services to
go through the RBT training (Ed Supports, 2015). The RBT training is a more extensive training than the current training being implemented, and costs more for companies to implement by paying their employees more during the on-boarding process before they start working with clients (Dr. James Carr, CEO of the BACB board, interview October 2015).

Job satisfaction

Job satisfaction is an effective response to one’s job as a whole or to particular facets of it, and previous studies have shown that there is a significant relationship between job satisfaction and actual turnover (Culver, Wolfle, & Cross, 1990; Mowday et al., 1982). Samuels (2008) reported on a study completed by the Easter Seals Society and the Autism Society of America in which researchers found that 70% of parents of children with ASD were concerned about their children’s education, as compared with 36% of parents of typically developing children. Only 19% of parents of children on the autism spectrum felt that their children were receiving education to adequately prepare them for life, compared with 56% of parents of children without disabilities. Plyles (2004) addressed another important effect of the stress in school for children with ASDs: the effect on their parents. Parents of these children struggle with (a) feeling the need to train teachers every year about ASDs and their children, (b) handling dietary restrictions, and (c) finding themselves being called into school often when there are behavior problems and needing to take their children home.

School itself can cause a great deal of stress for children with ASDs. Lawrence (2012) noted that school can be lonely, scary, and a stressful place for children with autism, especially those on the higher end of the spectrum. General educators have
consistently expressed misgivings about teaching children with autism due to feelings of inadequate preparation (Lambe, 2007). Parents cannot be responsible to educate the educators on autism and the systems needed to support their children.

Training and diverse clinical experiences may increase the experience of educators working directly with children with ASD. Regardless of teachers’ feelings or beliefs, teaching children with disabilities in the least restrictive environment, spending as much time with peers who do not receive special education services, is a requirement outlined by the federal legislation of the Individual with Disabilities Act (IDEA, 2004). The mandates of IDEA (2004) focused intensely on improving outcomes for all children, particularly minority and children with disabilities. This emphasis reinforces previous legislation aimed at improving outcomes for all students (U.S. Department of Education, 2001). The presence of a medical condition is required for a person to be eligible for disability entitlements. That any student with a disability between the ages of 3 and 21 (or prior to high school graduation) must be provided with a free, appropriate, public education (FAPE), regardless of the nature and severity of the disability (Hallahan & Kaufmann, 2006). Local districts are responsible for identifying and assessing students with potential disabilities through a comprehensive and nondiscriminatory evaluation process and for designing and implementing an Individualized Education Program (IEP) for each student with a disability (Hallahan & Kaufmann, 2006).

This paradigm shift requires all educators, even in the home setting, to focus on how best to address the needs of all the children diagnosed with autism in different environments. Therefore, BTs need adequate knowledge and training, including clinical experiences, for teaching children with autism. Autism is especially challenging for
teachers because it is a spectrum disorder that affects individuals differently and in varying degrees. The participants from both in home and special education settings are needed in order to understand the experience of teaching a child with ASD.

Online learning technologies are being utilized to train employees in the special education field including by providing a course taught by experts in the field of autism (Leech, 2008). The employees taking this course stated a need for more research and investigation in their own graduate courses to provide a more effective understanding of the most current teachings, practices, and the experience of those teaching implementing these practices with children diagnosed with autism. Teachers in training should have multiple opportunities to meet and interact with parents and family members of children with disabilities with the goal of promoting partnerships for the maximum student success. Whenever possible, this experience should be in the context of routine and successful educational planning and documentation (such as IEP meetings) regarding the education of children with autism. As White (1959) suggested in his Effectance theory of motivation, people must believe they are being effect by their experience. However, from a teachers’ perspective, the lack of motivation and self-efficacy in teachers are often the root cause of ineffective teaching of children with autism (Avramidis, Baylis & Burden, 2000). If special educators have superior training, preparation, and experiences, and are provided the tools to facilitate success, they will feel more confident in their abilities to teach children with autism. Probst and Lepper (2008) state that information about the particular characteristics of children with ASD as well as interventional methods should be strongly integrated into the curriculum of teacher-training programs.
Other studies demonstrate that teachers and other professionals who work with ASD students need to be well trained and supported with initial training, ongoing training and weekly support in order to provide coordinated services that are beyond the scope of efforts of individual teachers (Cotugno 2009; Dib and Sturmey 2007; Grey et al., 2005; Lerman et al., 2008; O’Neil et al., 1993; Schuster et al., 1991). The upgrading of teachers’ education on ASD contributes to the improvement of ASD children’s behavior, language, social capabilities, and play skills. Children’s behavior problems may potentially induce educational concerns and stress to teachers. This, in turn, can ultimately hinder teachers’ ability to cope with everyday problems of ASD children (Probst & Leppert, 2008). In several countries, the preparedness of educators in serving ASD children appear to be a subject of ongoing concern, evaluation, and reformation to innovatively adjust to the changing perception of the autistic disorders (Lian et al., 2008, Singapore; Mavropoulou and Padeliadu 2000, Greece; Probst and Leppert 2008, Germany, UK, US; Scheuermann et al., 2003, US; Simpson 2003, US;).

This concern of preparing educators is also supported by previous studies indicating that career experience and training is associated with job burnout in teachers of children with special needs (Miller, Brownell & Smith, 1998). The general indication is that teachers who have been in the field of special education longer are less likely to leave the field. Those teachers are experiencing a higher level of job satisfaction and a lower level of job burnout (Morvant, 1995; Singer, 1993; Stempien, 2002; Maslach, 2001). A study done by Zarafshan (2013) also found a significant association between general health and factors related to job burnouts and most of the other factors in a job satisfaction questionnaire. It is also observed that with the increase in the level of self-
efficacy, problems with general health decrease. This finding was also in line with previous studies that highlighted the negative effect of burnout and job satisfaction on general health (Liu & Meyer, 1994-1995). Teachers of students that are exhibiting challenges in areas of behavior, emotion, and communication are experiencing more stress and experience a higher level of burnout compared to teachers of others students with special needs, including learning difficulties and mental retardation (Banks, 1990).

One of the few studies relating specifically to burnout factors in ABA therapists working with children with autism was conducted by Gibson, Grey, and Hastings (2009). The authors evaluated the influence of perceived supervisor support and therapeutic self-efficacy, having the confidence to control one's own motivation, behavior, and social environment, on burnout in ABA therapists working in schools with children with autism. Results revealed that the length of time spent providing one-on-one treatment to children with autism was positively associated with therapeutic self-efficacy, such that those individuals who had worked in the field longer found their work more valuable and effective. Additionally, perceived supervisor support was found to be associated with a lower frequency of symptoms associated with burnout, including emotional exhaustion and depersonalization, as well as higher levels of personal accomplishment and perceived therapeutic self-efficacy. Finally, supervisor support appeared to serve as a protective factor against reduced feelings of personal accomplishment when ABA therapists were faced with high levels of perceived work-related demands.

Other studies have reviewed the influence of specific types of client or student presenting behaviors on burnout. Lundstrom, Graneheim, Eisemann, Richter, and Astrom (2007), examined the relationships among personality traits, emotional reactions,
work-related strain, and experiences of burnout among staff exposed to and not exposed to violence when working with people with intellectual disabilities. Results revealed that staff members who had been exposed to violence from their patients were more likely to describe their patients as agitated and less self-absorbed than those staff members who had not been exposed to violence or aggressive behavior. Staff members who scored higher on personality measures of harm avoidance and self-distractedness also scored significantly higher on measures of burnout. Snow, Langdon, and Reynolds (2007) also examined the impact of challenging behavior, that is, self-injury on staff burnout and staff attributions towards clients. Direct care staff were interviewed and presented with vignettes regarding patients who presented with self-injurious behaviors, after which they were asked to make attributions regarding the individual’s challenging behaviors on five dimensions: internal-external, personal-universal, controllable-uncontrollable, stable-unstable, and global-specific. Results revealed that staff that made few stable attributions about self-injurious behavior reported higher levels of emotional exhaustion and staff that reported high caseloads experienced higher levels of emotional exhaustion and lower levels of personal accomplishment. There were no reported significant relationships among burnout, age, or length of time working with clients who engaged in self-injurious behavior.

**Job retention**

The performance of organizations has been entirely relying on the efforts of the employees of the organization. Retaining such employees in the organization is vital in ensuring that the best talented employees remain in the organization for the longest time possible (James & Mathew, 2012). It is the role and responsibility of company
management to come up with programs, processes, and strategies aimed at retention of valuable employees in the company. Such programs and processes should be well implemented in the organization in order to ensure employee job satisfaction is guaranteed (Kessler, 2014). The retention of employees has both cost and benefits to ABA companies.

There are benefits that accrue to companies, which have successfully managed to retain valuable employees. Maintaining such productive labor in the organization has benefits of improving the performance of the organization, especially in terms of productivity and quality of products (Hauser, 2014). In addition, retention can lead to increased innovation and creativity among employees, hence coming up with new and completely different products. There has been a relationship that exists between the success of employee retention in an organization and the success of the organization. With retention of employees, the efficiency when executing work process is assured (Doğanli & Demirci, 2014). Retention increases productivity through effective use of the intellectual capital in the organization. The speed of maintaining market flow of products is also possible with retention, as the employees do not vacate their line of production.

The fact that a lack of job satisfaction has been linked to attrition among special educators (Platt & Olson, 1990; Seery, 1990) makes it an important variable to investigate in the context of the attrition problem. Staff shortages in special education are forcing increased attention to the issue of recruitment and retention of special educators. Staff shortages exist for both special education teachers and related service providers (The Council for Exceptional Children, 1994). However, as early as 1983, the more critical problem appears to be one of retention:
To understand the difficulties schools now have in recruiting and selecting academically able people to teach, one must understand that schools (and in-home companies) are not organized to retain the services of these people after they are recruited. To concern ourselves with recruiting and selecting high-ability people for schools without first making schools (and in-home companies) more attractive to these people is likely to be dysfunctional (Schlechty & Vance, 1983, pp. 477-478).

Special educators, people working with children with special needs in the home and school setting, been and continue to be at a higher risk of leaving the field than their general education counterparts (Boe, Bobbitt, & Cook, 1993). Some turnover is to be expected; however turnover among special educators reached excessive proportions—as high as 30% in certain locations (Federal Register, May 6, 1991, p. 21226). The quality and success of ABA in-home programs is heavily reliant upon the performance and attitudes of those providing it, the therapists (Giboson et al., 2009). Researchers have developed and tested stress management and burnout-reduction interventions with other populations, such as general education teachers (Russell, 1987) and parents of children with special needs (Singer, Irvin, Irvine, Hawkins, & Cooley, 1989). Others have called for such interventions to be applicable for special educators and related service providers (e.g., Banks & Necco, 1990; Greer & Greer, 1992; Platt & Olson, 1990). Enabling special educators to cope more effectively with the stressful demands of their profession may potentially alleviate the turnover problem in the short term. However, in the long term more systematic changes will need to be put in place over considerable time.
Another approach in retaining special educators is factors of reducing the collegial isolation that special educators experience. Researchers have continuously called for interventions that offer opportunities for collaborative, work-related problem solving and support (e.g., Billingsley, Bodkins, & Hendricks, 1993; Kushman, 1992; Roseenholtz, 1989). Behavior Therapists are isolated in the client’s homes with minimal interaction with their peers. Collaboration approaches have been developed and evaluated as a tool for employee retention in other contexts (e.g., Johnson & Pugach, 1991). Lastly, lack of support and guidance from administration and managers is often cited as a big contributor to the attrition problem (Billingsley, 1993; Brownell & Smith, 1992). With this last factor, peer collaboration programs are not only potentially useful as the means of overcoming collegial isolation (Billingsley, Bodkins, & Hendricks, 1993), they are also a way for peer employees to provide the support and assistance they may lack from their administrators or supervisors.

**Synthesis Matrix**

Synthesizing literature involves comparing, contrasting, and merging disparate pieces of information into one coherent whole that provides a new perspective (Roberts, 2010). A high-quality literature review reflects careful analysis of all sources and a critical synthesis in which previous studies and information are related to each other (Roberts, 2010). The synthesis matrices developed for this study highlight the literature that was reviewed and identify the key factors that influence job satisfaction and job retention. Five matrices were developed by the researcher (Appendix A) that merge all pertinent information regarding factors that influence job retention and job satisfaction of BTs in in-home ABA companies.
The first matrix highlights the history of autism and the growth of diagnosis throughout the years. Since 1987 when Lovaas brought the word autism into the mainstream, it became evident that there needed to be a greater understanding of the diagnosis and how to provide services to the children that were being diagnosed. It is evident that law and policy govern the transition planning process. Understanding the autism diagnosis is a crucial part in providing services in the home setting. Due to the wide range spectrum of autism, it is difficult to provide all the support services needed to employees working in the home setting.

The second matrix highlights the importance of ABA services. ABA services are unique to the individuals involved. Services consist of assessments, communication with vendors, and collaboration between all stakeholders involved, ongoing training, and stakeholder involvement. Parents have heightened levels of stress and anxiety raising a child diagnosed with autism; to ease these uneasy feelings, trust and confidence in their ABA team is crucial to the collaboration and services provided.

The third matrix highlights the barriers affecting job satisfaction while working in the home setting providing ABA services. Employees are working in an environment that an employer cannot control and where supervision is at a minimum. The buy-in from the family is crucial to the satisfaction and stress level of the BT. Educators and service providers need to understand the family dynamics and values to create a shared transition plan.

The fourth matrix highlights the impact of job retention on providing ABA services. The impact of high turnover when working with a child that needs consistency in order to learn and grow is crucial to a child diagnosed with autism. Strategies to
support school staff can enhance transition outcomes. Proper support and communication can assist and alleviate the overall stress and anxiety associated with working in the home setting providing ABA services.

The fifth matrix highlights the factors that affect job retention and job satisfaction at the special educational level. These factors are crucial the employee retention and job satisfaction in the special education field. There have been very few studies that have highlighted the factors that affect job retention and job satisfaction at the Behavior Therapist level. These are the core factors we will be looking at in this study.

**Summary**

This review of the literature provided a basis to understand job retention and job satisfaction. Additionally, the literature review provided an understanding of the history of autism, ABA, and the current changes happening in the industry. Chapter III details the methodology that will be used for the present study, including a description of the design of the study, the data collection procedures, and the data analysis. Chapter IV will discuss the findings of the current study and Chapter V will examine conclusions and recommendations for future studies.
CHAPTER III: METHODOLOGY

Overview

In the field of Applied Behavior Analysis, company’s ability to retain their employees can significantly impact the success of the company as well as the quality of services they provide to children diagnosed with autism. From an employee’s interaction during the onboarding process, to the quality of training they are provided, as well as the collaboration with their clinical teams and the support from the administration, all can have a direct influence on the employee’s satisfaction with his job.

Chapter III includes a description of the methodology and the procedures that were used to discover the factors that influence job retention and job satisfaction at the Behavior Therapist level. The chapter begins with the purpose and research questions used to guide this quantitative study. The research design is explained in this chapter, including the methodology, population, sample, instrumentation, reliability/validity, data collection and analysis, and limitations pertaining to this study.

Purpose Statement

The purpose of this relational study was to identify and compare the factors related to job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A second purpose of the study was to determine the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism. A further purpose of the study is to describe the improvements in the work place that behavior therapists working with
students with autism identified as necessary to increase their job satisfaction and job retention.

**Research Questions**

1. What factors do Behavior Therapists working with students with autism identify as important regarding job satisfaction and job retention?

2. What is the relationship between the level of burnout and job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?

3. What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with students with autism?

4. What improvements in the work place do Behavior Therapists working with students with autism identify as necessary to improve their job satisfaction and job retention?

**Research Design**

The research design for this study was a descriptive study utilizing quantitative data to answer the research questions. The design involved gathering data that described events, and then organizing, tabulating depicting, and describing the data collection (Yin, 2013). This study used quantitative data to determine the factors that influenced the job retention and job satisfaction of Behavior Therapists. This study surveyed Behavior Therapists from 5 different companies in the San Francisco Bay area. The survey data was analyzed using two different methods: a) linear regression, and b) the ranking of the data by the frequency of responses to the survey.
The study used quantitative methods to examine the issues embedded in the study purpose and the research questions. Quantitative research uses statistics to analyze the collected data in order to draw conclusions (Patton, 2012). In this study, a survey was utilized as the instrument to collect data. The value in using surveys is that one can quickly and easily “learn about people’s attitudes, beliefs, values, demographics, behaviors...ideas, and other types of information” (McMillan & Schumacher, 2010, p.235). Due to the low cost, efficiency, adaptability, and ease of collecting information from a large population of participants, survey research is often used in doctoral dissertations (McMillan & Schumacher, 2010). Survey design was appropriate for this quantitative study as it allowed for “attitudes or opinions of a population and numeric description of trends, by studying a sample of that population” (Creswell, 2009, p. 145).

The survey used in this study was composed of four components. All participants completed a) a demographic questionnaire, b) the Maslach Burnout Inventory (MBI) (Maslach, Jackson, & Leiter, 1996) which was purchased, and c) a 24-item survey developed by the researcher to identify intrinsic and extrinsic factors that influence job satisfaction, and d) improvements that ABA Therapists perceived could improve their workplace job satisfaction and retention. The demographic information that was collected from the participants included the following information: age, gender, current company they work for, length of time conducting ABA therapy in the home setting, average numbers of hours worked per week, and average number of hours traveled for work per week.

The participants’ rating of the 22 factors in the MBI and the 24 items in the Job Satisfaction Survey provided an indication of the overall extent of burnout and job

55
satisfaction. Further, the survey provided an overall comparison between job satisfaction and employee retention. The data were then analyzed using a stepwise multiple linear regression analysis to determine if there were significant relationships between the level of burnout and the level of intrinsic and extrinsic motivation perceived by behavior therapists. Data was kept online and in a Dropbox, and labeled as company 1, 2 and 3.

**Population**

In the 1980s, autism was a rare disorder occupying less than 5% of the developmental services caseload. As of 2015, 70% of all intakes into the Department of Developmental Services (DDS) system are children diagnosed with autism. Figure 2 represents the growth in California in the last twenty-four years. Table 1 presents information on how much autism has increased in California, and specifically in the Bay Area, in the last 25 years. The Bay Area has had the fastest rate of growth of children diagnosed with autism in the past 10 years (Autism Society, 2015). DDS cases in the Bay Area have increased by 1554% from 1990-2015. Three-fourths of the Bay Area Counties experienced over 1000% increases, and two of those had increases of over 2000%.
Figure 2. Change in the DDS Autism Cases, in California 1989-2014

Population is defined as “a group of elements or subjects; objects, individuals, or events that conform to specific criteria and to which we intend to generalize the results of the research” (McMillan and Schumacher, 2010, p.129). The population in this study included Behavior Therapists servicing children with autism. In the Bay Area, there are over 50 ABA companies with an estimated 4,000 BTs employed in these companies (Ed Supports, 2015). Due to the fact that they are privately held companies, and are
competitors, ABA companies do not publish data on the employees. Therefore, it is impossible to determine the exact number of BTs employed in the Bay Area.

Table 1

*Change in DDS autism cases, Greater Bay Area, 1990 v 2015*

<table>
<thead>
<tr>
<th>DDS Autism Cases, Bay Area Counties, 1990 v 2015</th>
<th>1990</th>
<th>2015</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>190</td>
<td>2,989</td>
<td>1573%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>117</td>
<td>2,027</td>
<td>1732%</td>
</tr>
<tr>
<td>Marin</td>
<td>58</td>
<td>163</td>
<td>281%</td>
</tr>
<tr>
<td>Napa</td>
<td>1</td>
<td>252</td>
<td>2291%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>67</td>
<td>568</td>
<td>848%</td>
</tr>
<tr>
<td>San Mateo</td>
<td>71</td>
<td>748</td>
<td>1054%</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>147</td>
<td>3,151</td>
<td>2144%</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>20</td>
<td>276</td>
<td>1380%</td>
</tr>
<tr>
<td>Solano</td>
<td>64</td>
<td>718</td>
<td>1122%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>67</td>
<td>827</td>
<td>1234%</td>
</tr>
<tr>
<td>Greater Bay Area</td>
<td>754</td>
<td>11,719</td>
<td>1554%</td>
</tr>
</tbody>
</table>

ABA companies hire Behavior Therapists (BTs) as entry-level employees. ABA therapists are the employees that work directly in the home setting with the children diagnosed with autism. They implement ABA programs working with the clinical team and the families in a 1:1 setting. They are a crucial part of the clinical team. Services cannot be provided to the child diagnosed with autism unless there is a BT hired and
placed to work with the child in the home setting. If a BT is not placed in the home setting, services cannot be provided, which makes them an important factor in the success of any ABA company.

Due to the high number of ABA companies in the Bay Area, the researcher reduced the number for this study to five ABA companies in the Bay Area. The three criteria used to select these five ABA companies included:

1. Thirty or more Behavior Therapists employed in the ABA company,
2. The ABA company was located in the Bay Area, CA.
3. The ABA company was willing to allow their Behavior Therapists to participate in this study.

There are 150 ABA therapists in these three ABA companies and each company is listed in Table 2. This is the target population identified for this study representing the total population of ABA therapists in the Bay Area. Consequently, the target population of this study is of sufficient size to offer information and insight that may help ABA companies understand and improve job satisfaction and job retention among ABA therapists.

Table 2

Bay Area-Three ABA companies, their location and number of BTs

<table>
<thead>
<tr>
<th>Company</th>
<th>Year established</th>
<th>Location in the Bay Area</th>
<th>Number of BTs employed in the company</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2006</td>
<td>Oakland, CA</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>2003</td>
<td>Berkeley, CA</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>2001</td>
<td>Pleasanton, CA</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>
Each of the three companies contacted by the researcher directed her to the company’s Human Resources Department (HR). The researcher explained the study and the purpose for doing the study. The instrument to collect the data was also shown to the HR representative so they had a clear picture of the type of questions that were going to be asked of their employees. Once verbal consent was received, an official letter was sent to the HR department introducing the researcher to the company and explaining the nature of this study (Appendix B). A follow-up phone call to ensure they received the email was conducted. The HR department passed the information along to the owners of the company. Within a week of the first initial contact the letters were returned to the researcher consenting to the study. The participating companies were then assigned a letter from the alphabet by the researcher to protect their identity.

**Sample**

McMillan and Schumacher (2010) assert that “in quantitative studies the group of subjects or participants from whom the data are collected is referred to as the sample” (p.129). Purposeful sampling was utilized to identify the participants, assisting the researcher in seeking out individuals who would contribute to the gathering of data by producing relevant information that supported the study (McMillan and Schumacher, 2010). Furthermore, Patten (2012) clarified purposive sampling as a way to find individuals that the researchers believe are key informants in terms of social dynamics, leadership positions, job responsibilities, and so on (p.19).

The purpose of the sample size was that it “allows small groups of individuals who are likely to be knowledgeable and informative about the phenomenon of interest” (McMillan & Schumacher, 2010, p. 489). The sample used in this study was a systematic
random sample selected from the target population of 150 Behavior Therapists employed at the 3 ABA companies located in the Bay Area. The HR Directors from each company assisted the researcher in forwarding an email to their ABA therapists explaining the purpose of the study along with directions on how to participate in the study. The ABA therapists who voluntarily completed the online survey were the sample population for this study.

To determine an appropriate sample size both the confidence level and the sampling error were considered when generalizing about the population characteristics. The level of precision, also called the sampling error, “is the range in which the true value of the population is estimated to be” (Israel, 2009, p.1). This range is usually expressed as a percentage value (e.g., ±5 percent). For example, if a researcher found 70% of the BTs in the sample stated that hourly rate of pay is an important factor for job satisfaction, with a precision rate of ±5%, the researcher could conclude that between 65% and 75% of BTs felt that hourly rate of pay was important. The confidence interval “is a range of numerical values in which the actual value of the population probably lies. The upper and lower boundaries of the confidence interval are called the confidence limits” (McMillan and Schumacher, 2010, p. 296). Researchers typically report a 95% or 99% confidence interval. For example, if it is reported that the 99% confidence interval from a survey of BTs is .432 to .495, this means that from that sample the researcher can assume that there is a 99% change that between 43.2 and 49.5% of the population is in favor of an hourly rate increase.

Given that the target population contains Behavior Therapists, the researcher chose a confidence level of 95% and a precision level of ±5%, indicating that the sample
population should be approximately 108 BTs. Using sample size calculators available to the public, a significant sample size related to the population being studied provides rigor to the study (Creswell, 2007).

**Instrumentation**

The survey instrument used for the study was composed of 4 components that were cross-referenced to the synthesis matrix to ensure the instrument comprehensively addressed the research questions (Appendix C).

**Survey Component 1:**

The Maslach Burnout Inventory Survey (MBIS) was used to measure the participants’ perceptions of the factors that are important to job retention. The MBIS is a publically available survey that has been used for over 25 years with many different population groups. The survey includes 22 items that ask the participant to rate factors affecting job satisfaction using a 6 point Likert Scale. The instrument produces ratings for each item and three scale scores addressing the three dimensions of emotional exhaustion, depersonalization, and personal accomplishment. In addition, the researcher provided an open-ended item for the participant to list any additional factors they believed were important to job retention (www.mindgarden.com).

**Survey Component 2:**

A 24-item job satisfaction survey was created to measure self-perceived factors related to job satisfaction identified in two categories: intrinsic and extrinsic motivation factors. Extrinsic factors were defined as those external benefits provided to the professional by the facility or organization. Such factors include flexible schedule, competitive pay, and continuing education. Intrinsic factors are those controlled
primarily by the professional and affect the professional's sense of self-efficacy and competence. These factors include having diversity in practice, providing direct patient care, having meaningful work, and providing quality care. The items were rated on a Likert scale of 1-5.

**Survey Component 3:**

The researcher provided three open-ended survey items for the participants to describe improvements to the workplace that can be made to increase their job satisfaction and job retention, respectively. Open-ended questions provide an opportunity for participants to respond without being required to choose options. The open-ended questions provided additional information that was used to illuminate and expand upon the findings resulting from the quantitative data.

**Survey Component 4:**

In addition, the instrument also included demographic questions intended to gather information about the participants and their employment. The demographic information that was collected from the participants included the following information: age, gender, ethnicity and length of time conducting ABA therapy in the home setting at their current company. In addition, the companies the participants worked for were coded with a letter A-E to conceal the identity of the company and to provide the researcher a context for the demographic information.

The instrument used in this study was placed on www.surveymonkey.com for electronic access by the study participants.
Validity and Reliability

There are various kinds of reliability, and “threats to validity and reliability can never be erased completely; rather the effects of these threats can be attenuated by attention to validity and reliability throughout a piece of research” (Cohen et al., 2007). In other words, “it is impossible for research to be 100 per cent valid” (Cohen et al., 2007) and reliable. More specifically, it is impossible for quantitative research because “it possesses a measure of standard error which is inbuilt and which has to be acknowledged” (Cohen et al., 2007). Therefore, validity should be a matter of degree instead of an absolute state.

To determine the reliability of the Maslach Burnout Inventory (MBI), Hastings et al. (2004) conducted a factor analytic study of the MBI using the Educators survey version with employees working in community services with individuals with intellectual disabilities. Children diagnosed with autism share some of the same characteristics as those with intellectual disabilities. There were 184 participants in Hastings et al.’s study-115 females and 69 males. They completed the twenty-two item Likert-scale Maslach Burnout Inventory for Human Services Professionals. After the proposed analyses had been conducted, Hastings et al. confirmed that there were in fact three factors: emotional exhaustion, depersonalization, and personal accomplishment. Hastings et al. (2004) concluded that the MBI has been shown to be a reliable source for collecting data from employees who work in services for the developmentally disabled.

The Mohrman-Cooke-Mohrman Job Satisfaction Scale Survey (MCMJSS) (Mohrman et al., 1977) has been widely used in doctoral theses and research articles in educational settings (Al-Omari, 2008; Cerit, 2009; Hardman, 1996; Leary et al., 1999;
Proffit, 1990). This survey was expanded into a new survey to encompass the feedback received from the professional panel when the pilot study was implemented. Due to the feedback given from the professional panel, MCMJSS was not used in the final survey. The professional panel did not believe the questions truly represented the employees that would be surveyed and did not go deep enough in the answers needed to have a true understanding of job satisfaction and job retention at the BT level. The second pilot study was developed based on the feedback received from the first study, and it encompassed factors that were revealed in the literature review related to job satisfaction. The second pilot study was sent out to the same professional panel and the questions were more easily understood and clear.

The present researcher conducted a pilot study to ensure the reliability of the survey used in this doctoral research. The survey was sent to five professionals working in ABA companies that were not participating in the present study. The five professionals were contacted via email to request their participation in the pilot study. They consented and were sent an email with instructions on how to access the survey. Each participant was given a week to respond to the survey and provide feedback on their experience in taking the survey. Due to the feedback that was received from the professional panel the MCMJSS survey was removed from the present study, and the original survey designed by the researcher was expanded.

**Data Collection**

The data collected in this survey was collected by an online website called SurveyMonkey. SurveyMonkey is an online tool used to create and upload a survey, distribute it to as many people as needed, and collects the data all in one place. The Survey
The researcher sent an email to the HR Directors from the five companies participating in the study to inform them of the timeline for sending out the survey and the target date for survey completion. The email contained directions for the participants, including the Survey Monkey web address link. When a participant clicked on the link, the first page presented the Informed Consent Form (See Appendix D) and the Research Participant’s Bill of Rights (See Appendix F). The participant was asked to read the forms and chose “agree” or “disagree” on the forms. The “agree” button acknowledged receipt of the forms and their consent to participate in the study. The participants who agreed to take the survey could decline to answer any of the questions they did not want to answer. All data was stored on Survey Monkey and the researcher and the statistician were the only ones with access to this data. A letter and a number identified each participant. For example, for company A, A1 was the identification for the first participant in company A who took the survey.

Participants were asked to complete the survey within a two-week period. A two-week period was chosen to encourage participants to take the survey right away by giving them a short window to take the survey. It was anticipated by the researcher that the short amount of time given to participants would create a higher sense of urgency to
quickly take the survey. The short time response period also encouraged participants not to forget to take the survey. Two follow-up emails were sent to the HR departments to send to the participants, one week after the initial email and ten days after the initial contact, to help create a higher response rate. The data was collected on Survey Monkey where the data was stored and available to the researcher to download and analyze at the end of the data collection period.

Prior to beginning the data collection from the population of participants, the researcher was approved to conduct the research from the Brandman University Institutional Review Board (BUIRB) (See Appendix G). In order to protect the rights of the participants and their confidentiality, data collection did not begin until the researcher received approval from BUIRB.

**Data Analysis**

The survey was analyzed using two different methods: linear regression and ranking of data by the frequency of responses to the survey. The analysis of the data included four components. The first component of the data analysis consisted of organizing and comparing the data related to the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction. The MBI Educator Survey portion of the survey was analyzed using the scoring key provided by www.mindgarden.com which developed the survey. Each participant was given a rating from 1 to 5 in each of three categories:

- A high degree of burnout is reflected in high scores on the Emotional Exhaustion and Depersonalization subscales and low scores on the Personal Accomplishment subscale.
- An average degree of burnout is reflected in averages of all three subscales.
• A low degree of burnout is reflected in low scores on the Emotional Exhaustion and Depersonalization subscales and high scores on the Personal Accomplishment subscale.

As determined through the literature review, the burnout factors assessed on the MBI are also the factors commonly related to job retention. The terms burnout and job retention are used synonymously in this study. The scores are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third. Scores for each subscale (Emotional Exhaustion, Depersonalization and Personal Accomplishment) are considered separately and are not combined into a single total score. Thus, three scores were computed for each participant.

The job satisfaction part of the survey was divided into two categories: intrinsic motivation and extrinsic motivation. A Likert scale was used to measure frequency of agreement or disagreement of each factor presented. Each participant was given a rating from 1 to 5, in each of three categories:

• A high degree of intrinsic or extrinsic motivation is reflected in average scores of 4-5 in the related job satisfaction survey items.

• An average degree of intrinsic or extrinsic motivation is reflected in an average score of 3 in the related job satisfaction survey items.

• A low degree of intrinsic or extrinsic motivation is reflected in an average score 1-2 in the related job satisfaction survey items.

The scores are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third.
Scores for each subscale (intrinsic and extrinsic) are considered separately and are not combined into a single total score. Thus, two scores were computed for each participant.

These data provided an overall indication of the extent of burnout and job satisfaction that resulted from the participants’ rating of the 22 factors in the MBI and the 24 items in the Job Satisfaction Survey. Further, they provided an overall comparison between job satisfaction and employee retention. The data were then analyzed using a stepwise multiple linear regression analysis to determine if there were significant relationships between the three levels of burnout and the three levels of intrinsic and extrinsic motivation.

The second component of the analysis of data included a comparison of the twenty-four job satisfaction factors and the 22 job burnout factors contained in the survey. A stepwise multiple linear regression was performed. Regression is a statistical technique for investigating, describing, and predicting the relationship between two or more variables (Gunes, n.d.). Using this regression analysis approach, the researcher was able to determine if there were significant relationships between the dependent and independent variables; more specifically, which job satisfaction factors were significant related to job retention among Behavior Therapists. A statistician assisted the researcher in processing the data. This type of statistical analysis allowed the researcher to analyze multiple independent variables (job satisfaction factors) in order to determine each of their effects on the dependent variable (job burnout/job retention.) The analysis provided an understanding of the type of job satisfaction factors that had the greatest effect on job retention. The analysis of the data determined the combination of job satisfaction factors that most substantially affected job retention.
The third component of the data analysis organized the responses to the three open-ended survey questions and ranked them by frequency of response. The participant responses were listed in a ranked order by the number of substantially similar responses. These data assisted the researcher in further understanding the results of the regression analyses and what actions the participants believed were necessary in the future to improve their job satisfaction and retention within the ABA Industry.

The fourth component of the survey was an analysis of the demographic information provided by the participants. The demographic data were analyzed to provide context and insight regarding the study participants and the data derived from their responses. The data were organized by the frequency of response for each of the demographic items.

**Limitations**

Limitations are factors in a study that cannot be controlled but that negatively affect the results of the study (Roberts, 2010). Due to time constraints, in-home ABA companies were hesitant to participate because the researcher works for a competitor company. The companies did not want the researcher to have access to their employees due to potential recruitment. Another limitation was the reliability of receiving a measurable amount of surveys from the sample population for data analysis. Another limitation is that participants may rush through the survey and not guarantee honesty in their answers.

One major limitation was the lack of experience Behavior Therapists had in the ABA field. It was difficult to find employees that had been in the ABA field for longer than a year. Therefore, the researcher decided that the therapist must have been
employed for 3 months to participate in the study. Further, the ABA therapists had not worked for many in-home ABA companies so they did not have much to compare their experience to. For many, this was their first job out of college, and therefore they did not have much experience in the ABA field.

**Summary**

The purpose of this chapter was to inform the reader of the purpose of the study and the research questions that were posed by the researcher. The population of companies who had BTs that could participate in the study was identified by personal acquaintances of the researcher. A survey was developed specifically for this study. Experts and personal experience guided the development of the questionnaire. Once the target population was identified, random selection was used to collect the quantitative data that was used. The limitations were presented and reviewed. The final two chapters of the study reveal major findings, provide recommendations for future study, and conclude the study.
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Chapter I provided the overall background and rationale for the current study. Chapter II presented a detailed review of the literature and research related to job satisfaction and job retention among Behavior Therapists. Chapter III included the research design and methodology that was used in the study.

This chapter begins with a restatement of the purpose of the study and research questions, as well as a summation of the research method, data collection procedures, population, sample, and associated demographics. Following this, the chapter focuses on the presentation and analysis of the data, in both table and narrative form, through the analysis of each research question. This chapter concludes with a summary of the findings.

Purpose Statement

The purpose of this relational study was to identify and compare the factors related to job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A second purpose of the study was to determine the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism. A further purpose of the study is to describe the improvements in the workplace that behavior therapists working with students with autism identified as necessary to increase their job satisfaction and job retention.
Research Questions

1. What factors do Behavior Therapists working with children with autism identify as important regarding job satisfaction and job retention?

2. What is the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?

3. What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with students with autism?

4. What improvements to the work place do behavior therapists working with students with autism identify as necessary to improve their job satisfaction and job retention?

Research Methods and Data Collection Procedures

To connect the purpose to the process in investigating the factors that are important to job retention and job satisfaction and the relationship between these factors. A four-part survey was administered in order to address the research questions in this study. Part 1 included the Maslach Burnout Inventory Survey (MBIS) to measure the participants’ perceptions of the factors that are important to job retention. The MBIS includes 22 items that ask the participant to rate factors affecting job satisfaction using a 6 point Likert Scale. Part 2 was a 24-item job satisfaction survey created to measure self-perceived factors related to job satisfaction and identified in two categories: intrinsic and extrinsic motivation factors. Extrinsic factors were defined as those external benefits provided to the professional by the facility or organization. In part 3 the researcher
provided three open-ended survey items for the participants to describe improvements to the workplace that can be made to increase their job satisfaction and job retention, respectively. Open-ended questions provide an opportunity for participants to respond without being required to choose an option. Part 4 of the survey consisted of the demographic data sought by the researcher. This included gender, months of experience, ethnicity and age.

Behavior Therapists were given access to the online survey via an email. The researcher safeguarded the participant’s confidentiality and anonymity. Participants were advised, through the Informed Consent Form that participation in this study was strictly voluntary and there were no known or anticipated risks to participating in this study. The data collected was kept in a secure location and was destroyed once the research was completed and the final dissertation was approved.

**Population**

The population in this study included Behavior Therapists servicing children with autism. In the Bay Area, there are over 50 ABA companies with an estimated 2,000 BTs employed in these companies (Ed Supports, 2015). Due to the fact that they are privately held companies, and are competitors, ABA companies do not publish data on the employees. Therefore, it is impossible to determine the exact numbers of BTs employed in the Bay Area.

ABA companies hire Behavior Therapists (BT) as entry-level employees. ABA therapists are the employees that work directly with the children diagnosed with autism in the home setting. They implement ABA programs working with the clinical team and the families in a 1:1 setting. They are a crucial part of the clinical team. Services cannot be
provided to the child diagnosed with autism unless there is a BT hired and placed to work
with the child in the home setting. If a BT is not placed in the home setting, services
cannot be provided, thus the Behavior Therapist is important to the success of any ABA
company.

Due to the high number of ABA companies in the Bay Area, the researcher
reduced the number for this study to five ABA companies in the Bay Area. The three
criteria used to select these five ABA companies included:

1. Fifty or more Behavior Therapists employed in the ABA company,
2. The ABA company was located in the Bay Area, CA.
3. The ABA company was willing to allow their Therapists to participate in this
   study.

There are 150 ABA therapists in three companies who meet those criteria. Five
companies initially indicated their interest in participating in the research. However,
when the study began 3 of the 5 decided to participate. This is the target population
identified for this study representing 15% of the total population of ABA therapists in the
Bay Area. Consequently, the target population of this study is of sufficient size to offer
information and insight that may help ABA companies understand and improve job
satisfaction and job retention among ABA therapists.

Sample

Given that the target population contains 150 Behavior Therapists, the researcher
chose a confidence level of 95% and a precision level of ±5%, indicating that the sample
population should be approximately 109 BTs. Using sample size calculators available to
the public, a significant sample size related to the population being studied provides rigor to the study (Creswell, 2007).

**Demographic Data**

Behavior Therapists from all three companies participated in the survey, as noted by the responses received from company one, two and three. This ensured participation from all three companies, which was important to the researcher. After two days, the researcher noticed no responses from company 2. Therefore, company two was contacted to inquire if the survey link had been forwarded to the Behavior Therapists. The researcher learned from the HR Department that the link was going to go out sometime that week, and it was not certain which day it would go out. The survey link went out the next day, which was 3 days after the link was given to the company. Company three did not send the link out to the employees until four days after they received the link. They also refused to send out a reminder link to the employees after week one was over. Communication was cut off from the researcher and the company with no explanation and no further survey responses were received. This resulted in the BTs in company three from providing the least amount of survey responses which represented 19% of the responses. Company one had the highest participation rate of 54% of the responses and company two represented 26% of the responses.

Of the 112 participants in the analysis of this study, only 86 survey results were able to be used due to incomplete surveys. In order to calculate the linear regression, only complete surveys can be used to achieve accurate results. Several companies had verbally agreed to participate in the study; however, when it was time to conduct the study with their employees they declined to participate. One company stated “I do not
want the Behavior Therapists to take the survey because I do not want them to think about how unhappy they are and then they quit.” After further discussion with the researcher’s dissertation chair and statistician, the number of participants used in the data analysis was determined sufficient to move forward and produce valid results from the step-wise linear regression calculations, with the idea that the optimal sample size may not be the largest that resources allow. The key limitation with the number of participants is that the results are limited to detecting large differences between the design and the measures. The researcher moved forward with the smaller sample size of 86 because it is the most efficient and appropriate size that the methodology permits (Hamlin, 2010).

Table 3

Total Number of Participants surveyed, and the total Number of Surveys Analyzed
Responses

<table>
<thead>
<tr>
<th>Company</th>
<th>Number of participants surveyed</th>
<th>Number of participant surveys used in the analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>company 1</td>
<td>62</td>
<td>46</td>
</tr>
<tr>
<td>company 2</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>company 3</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>86</td>
</tr>
</tbody>
</table>

The survey contained five demographic questions that included participant gender, years as a Behavior Therapist, ethnicity, and age. Of the total 112 responses, 84.5% were female (n = 93), 15.45% were male (n = 17), while 1 participant did not answer the gender, ethnicity, age and experience question (see Table 4). The percent of female to male participants remained very similar to the overall responses when using the 86 analysis only responses, as 74.23% were female (n = 65), 25.77% were male (n = 21), and 1 participant did not respond. In a study done by Kazemi, Shapiro and Kavner they
also found this field to be predominately female, where 93% (n=89) of Behavior Therapists they surveyed were female and 7% (n=7) were male. The ABA field is predominately a female employee industry.

Table 4

**Participant Gender of All Responses and Analysis Only Responses**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>94</td>
<td>89.3</td>
<td>72</td>
<td>83.7</td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>15.45</td>
<td>14</td>
<td>16.3</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The respondents’ years as professional educators were unevenly distributed (see Table 5). The Behavior Therapists with nine to twelve months of in-home experience were the smallest group, represented in both the total responses and the analysis only responses. There were only six Behavior Therapists with nine to twelve months of experience in the all response group, representing 9.90% (n=11) of the participants, and 5.45% (n=6) of participants in the analysis only response group. The next largest group was the Behavior Therapists with six to nine months working at an in-home company. In the all response group the BTs with six to nine months of experience represented 8.1% (n = 9), and in the analysis, only response group they represented 16.97% (n = 7). There were slightly more BTS represented in the three to six months of professional experience compared to both the six to nine months and nine to twelve months of experience groups. In the all response group the BTs with three to six months of experience represented 17.1% (n = 19), and in the analysis, only response group they represented 15.11% (n = 13). The second largest group was the less than three months of experience group that represented 24.3% (n=27). In the analysis, only response group, the BTs with 3 months
or less of experience represented 23.25% (n= 20) of the surveys. The group with the most significant representation was the twelve months or more experience as a Behavior Therapist. The all response group represented 45.94% (n = 40) of the total surveys collected. Of the surveys analyzed, BTs with 12 months or more of experience represented 46.50% (n= 40) of the surveys analyzed. Additionally, one participant failed to answer the years of experience question. One result from the data showed 67% of the BTs surveyed had worked in the ABA field for less than a year. This is a major concern among owners of ABA companies in terms of job retention. The Behavior Therapist position is an entry-level position and does not require someone to have a college education or experience in the ABA field.

The following table represents how long each participant has been working with an in-home ABA company. The percentages were calculated by the number of participants who reported the length of employment divided by the final number of participants. More than half of the participants who responded, have been with their current ABA company for less than a year. This is a huge retention factor in the industry.

Table 5

Participant Years as a Behavior Therapist’s Responses and Analysis Only Responses

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Number of Responses</th>
<th>%</th>
<th>Number of Analyzed Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 3</td>
<td>27</td>
<td>24.32</td>
<td>20</td>
<td>23.25</td>
</tr>
<tr>
<td>3 – 6</td>
<td>19</td>
<td>17.12</td>
<td>13</td>
<td>15.11</td>
</tr>
<tr>
<td>6 – 9</td>
<td>9</td>
<td>8.1</td>
<td>7</td>
<td>8.12</td>
</tr>
<tr>
<td>9-12</td>
<td>11</td>
<td>9.90</td>
<td>6</td>
<td>6.97</td>
</tr>
<tr>
<td>12+</td>
<td>46</td>
<td>41.44</td>
<td>40</td>
<td>46.5</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Due to the data represented in each question, the research questions were represented out of order. Research question one was a summary of all the factors discovered and is reported at the end of this chapter.

**Research Question 2**

What is the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?

The job satisfaction component of the survey was divided into two categories, intrinsic motivation and extrinsic motivation. Participant responses on a Likert scale was used to determine agreement or disagreement for each factor presented. Each participant marked a rating from 0 to 5, with 0 being never and 5 being a few times a week. The three categories of measurement are as follows:

- **A high degree of intrinsic or extrinsic motivation** is reflected in average percentage of 51% and above in the related job satisfaction survey items.
- **An average degree of intrinsic or extrinsic motivation** is reflected in an average percentage of 26-50% in the related job satisfaction survey items.
- **A low degree of intrinsic or extrinsic motivation** is reflected in an average percentage of 0-25% in the related job satisfaction survey items.

The scores are considered highly agreeable/disagreeable if they are in the upper third of the normative distribution, agreeable/disagreeable if they are in the middle third, and disagreeable if they are in the lower third. Scores for each subscale (intrinsic and extrinsic) are considered separately and are not combined into a single total score. Thus, the researcher calculated two scores for each participant. The standard deviation mean between the lowest score and the highest score is 50%. 2/3 of the agreed upon scores fell into the 51% and higher category. Therefore, if more than 51% of the participants agreed
with a factor, the factor held true to be an agreeable factor. The scores are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third. This type of statistical analysis allowed the researcher to analyze multiple independent variables (job satisfaction factors) in order to determine each of their effects on the dependent variable (job burnout/job retention). The analysis provided an understanding of the type of job satisfaction factors that had the greatest effect on job retention. The analysis of the data determined the combination of job satisfaction factors that most substantially affected job retention.

**Extrinsic Motivators**

The following table, Table 6, represents the extrinsic factors BTs agreed with. Of the BTs surveyed, 72% stated they are respected and treated fairly by their supervisors, 61% feel their job expectations are reasonable, and 60.45% stated that the administrative staff are available and supportive when they need them. The mean score represented the average response given on the Likert scale 0-5. It represents the most often given answer. Gibson, Grey, and Hastings (2009) conducted a survey with 81 BTs in Ireland and found that perceived supervisor support served as a moderator between work demands, personal accomplishment, and burnout. The feeling of being valued and supported (Langeliers, 2013) was also found as a motivator for job retention and job satisfaction.

The researcher also looked at the factors that the BTs disagreed with in the survey. Agreement and disagreement were both rated by the 51% scale. The negative ratings indicate disagreement with the survey items, which are all written as positive statements. Therefore, the ratings five items in Table 7 display a list of the items that are
contrary to the positive statements. Of the BTs surveyed, 73% reported they are not compensated well for the job they are doing, 72% feel they do not have a great relationship with their clinical team and 62% of the BTs surveyed stated they do not have enough hours to meet the BTs financial needs. Kazemi, Shapiro & Kavner (2014) found that satisfaction with training, supervision, pay, and different aspects of their job were statistically significant correlates of turnover intentions such that as satisfaction decreased, intent to turnover increased. Turnover intention is a measurement on whether a BT plans to leave an organization or a company plans to remove employees from positions. This result was also found in the open-ended questions as the one of the top factor suggested for ABA companies to implement in their company in order to retain employees within their company.

Table 6

*Six Extrinsic Factors that BTs agreed with*

<table>
<thead>
<tr>
<th>Extrinsic Motivators BTs agree with Statement</th>
<th>Percent of Total Frequency in agreement</th>
<th>Percent of Total Frequency in disagreement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel I am respected and treated fairly by my superiors.</td>
<td>72.093</td>
<td>28.907</td>
<td>3.24419</td>
</tr>
<tr>
<td>2. My job expectations are reasonable and obtainable.</td>
<td>61.6279</td>
<td>38.373</td>
<td>3.44418</td>
</tr>
<tr>
<td>3. I feel I am informed of my job duties to perform my job.</td>
<td>61.6279</td>
<td>38.3721</td>
<td>3.18605</td>
</tr>
</tbody>
</table>

(continued)
### Extrinsic Motivators

**BTs agree with**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent of Total Frequency in agreement</th>
<th>Percent of Total Frequency in disagreement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Admin personal are available and supportive when I need them.</td>
<td>60.4651</td>
<td>39.5349</td>
<td>3.44186</td>
</tr>
<tr>
<td>5. I have the opportunity to participate in the determination of methods, procedures and goals for the client’s programs.</td>
<td>55.814</td>
<td>44.186</td>
<td>3.4186</td>
</tr>
<tr>
<td>6. I receive the right amount of supervision.</td>
<td>53.4884</td>
<td>46.5116</td>
<td>2.76744</td>
</tr>
</tbody>
</table>

**Table 7**

**Six Extrinsic Factors that BTs disagreed with**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percent of Total Frequency in agreement</th>
<th>Percent of Total Frequency in disagreement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. The company's culture has an influence on my job performance.</td>
<td>46.5116</td>
<td>53.4884</td>
<td>3.32558</td>
</tr>
<tr>
<td>8. The distance that I travel on a daily basis is reasonable.</td>
<td>46.5116</td>
<td>53.4884</td>
<td>2.89535</td>
</tr>
<tr>
<td>9. I receive great benefits.</td>
<td>39.5349</td>
<td>60.4651</td>
<td>2.48837</td>
</tr>
<tr>
<td>10. I work enough hours to meet my needs.</td>
<td>38.3721</td>
<td>61.6279</td>
<td>2.48837</td>
</tr>
<tr>
<td>11. I have a great relationship with my clinical team.</td>
<td>28.425</td>
<td>71.575</td>
<td>2.10465</td>
</tr>
<tr>
<td>12. I feel I am compensated well for the job I am doing.</td>
<td>27.907</td>
<td>72.093</td>
<td>2.02326</td>
</tr>
</tbody>
</table>
Intrinsic Motivators

The job satisfaction component of the survey was divided into two categories, intrinsic motivation and extrinsic motivation. Participant responses on a Likert scale were used to determine agreement or disagreement for each factor presented. Each participant marked a rating from 1 to 5, in each of three categories.

- A high degree of intrinsic or extrinsic motivation is reflected in average percentage of 51% and above in the related job satisfaction survey items.
- An average degree of intrinsic or extrinsic motivation is reflected in an average percentage of 26-50% in the related job satisfaction survey items.
- A low degree of intrinsic or extrinsic motivation is reflected in an average percentage of 0-25% in the related job satisfaction survey items.

The scores are considered highly agreeable/disagreeable if they are in the upper third of the normative distribution, agreeable/disagreeable if they are in the middle third, and disagreeable if they are in the lower third. Scores for each subscale (intrinsic and extrinsic) are considered separately and are not combined into a single total score. Thus, two scores were computed for each participant.

The following table, Table 8, represents the seven intrinsic factors that BTs agreed as factors affecting job satisfaction and job retention. Having great communication and feeling supported and valued were the top two factors that influenced job retention and job satisfaction. Other factors consistently related to turnover intentions of both special education teachers and social workers were supervisory dimensions, including lack of emotional support, lack of interest in or assistance with employees’ work, and infrequent constructive feedback (Billingsley, 1993, 2004; Littrell & Billingsley, 1994). 68% of the BTs surveyed stated they have great communication with their clinical team, 67% stated they are supported and valued by their supervisors, and
63% stated they have opportunity for personal growth within the company. This result was also found in the open-ended questions that are described later in this chapter as the top factor suggested for ABA companies to address in their company.

Table 8

*Seven Intrinsic Factors that BTs agreed with*

<table>
<thead>
<tr>
<th>Intrinsic Motivators BTs agree with</th>
<th>Percent of Total Frequency in agreement</th>
<th>Percent of Total Frequency in disagreement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have great communication with my clinical team.</td>
<td>68.6047</td>
<td>31.3953</td>
<td>3.33721</td>
</tr>
<tr>
<td>2. Supervisors make me feel supported and valued.</td>
<td>67.4419</td>
<td>32.5581</td>
<td>3.10465</td>
</tr>
<tr>
<td>3. I have the opportunity for personal growth in the company.</td>
<td>63.9535</td>
<td>36.0465</td>
<td>3.51163</td>
</tr>
<tr>
<td>4. I feel self-esteem or self-respect from being at my job.</td>
<td>62.7907</td>
<td>37.2093</td>
<td>3.03488</td>
</tr>
<tr>
<td>5. I have the opportunity to be creative at my job.</td>
<td>61.6279</td>
<td>38.3721</td>
<td>3.40698</td>
</tr>
<tr>
<td>6. I have a great relationship with my clinical team.</td>
<td>60.4651</td>
<td>39.5349</td>
<td>3.02326</td>
</tr>
<tr>
<td>7. I feel worthwhile and accomplished at my job.</td>
<td>52.3256</td>
<td>47.6744</td>
<td>2.67442</td>
</tr>
</tbody>
</table>

BTs did not agree with five intrinsic factors presented in Table 9. 67.4% of the BTs surveyed stated they do not have a great work life balance, 59% of the BTs surveyed also stated they did not receive adequate training or have the proper tools to complete the job they were given. 55% of the BTs surveyed believe the job expectations do not match the expectations they had when they first started the job and they have the opportunity for job advancement. The BACB Board indicates that a more robust training is necessary for BTs to work with children diagnosed with autism. The Registered Behavior Technician (RBT) training is a more extensive training than the current training being implemented,
and costs more for companies to implement by paying their employees more during the on-boarding process before they start working with clients (Dr. James Carr, CEO of the BACB board, interview, October 2015). Several studies demonstrate that teachers and other professionals who work with ASD students need to be well trained and supported with initial training, ongoing training, and weekly support in order to provide coordinated services that are beyond the scope of efforts of individual teachers (Cotugno 2009; Dib and Sturmey 2007; Grey et al., 2005; Lerman et al., 2008; O’Neil et al., 1993; Schuster et al., 1991).

Table 9

*Five Intrinsic Factors that BTs disagreed with*

<table>
<thead>
<tr>
<th>Intrinsic Motivators BTs Disagree with</th>
<th>Percent of Total Frequency in agreement</th>
<th>Percent of Total Frequency in disagreement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have the opportunity to career advancement in the company I work for.</td>
<td>44.186</td>
<td>55.814</td>
<td>3.37209</td>
</tr>
<tr>
<td>2. My current work meets the expectation set forth when I first began my job.</td>
<td>44.186</td>
<td>55.814</td>
<td>2.94186</td>
</tr>
<tr>
<td>3. I feel I have all the tools I need to complete my job.</td>
<td>40.6977</td>
<td>59.3023</td>
<td>3.5814</td>
</tr>
<tr>
<td>4. I have received adequate training to complete my job.</td>
<td>40.6977</td>
<td>59.3023</td>
<td>3.39535</td>
</tr>
<tr>
<td>5. I have a great work and life balance</td>
<td>32.5581</td>
<td>67.4419</td>
<td>3.39535</td>
</tr>
</tbody>
</table>

Table 10 represents the top and low factors in extrinsic and intrinsic results. In looking at the frequency of the data, 50% was used as the measurement of agreement and disagreement of the factors. If the mean score of the frequency was higher than 50% it
was considered a factor the BTs agreed on or a factor the BTs disagreed on. The mean scores for the extrinsic motivating factors was 60% compared to the intrinsic motivators which was at 61%. This indicates that intrinsic and extrinsic factors are an influence on job retention and job satisfaction. BTs rated high with communication with the clinical team but rated low with having a great relationship with them in the extrinsic factors.

These findings are in line with previous researchers who have reported that effective supervision practices that include the provision of emotional and professional support, guidance, and performance feedback can serve as buffers against the adverse effects of working in child welfare agencies (Firth, Mellor, Moore, & Loquet, 2004; Mor Barak, Travis, Pyun, & Xie, 2009). 72% also agreed that being compensated well for the job they are doing is a factor that affects job retention and job satisfaction. A study done in Southern CA in 2014 (Kazemi, Shapiro and Kavner) found satisfaction with pay was a significant predictor of turnover intentions, whereas actual pay (i.e., pay per hour) was not. Thus, how much they were paid did not appear to offset the BTs turnover intentions.

Table 10

*Extrinsic and Intrinsic Motivators BTs agree with*

<table>
<thead>
<tr>
<th>Extrinsic Motivators BTs agree with</th>
<th>Intrinsic Motivators BTs agree with</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement</strong></td>
<td><strong>Statement</strong></td>
</tr>
<tr>
<td>1. I feel I am respected and treated fairly by my superiors.</td>
<td>1. I have great communication with my clinical team.</td>
</tr>
<tr>
<td>2. My job expectations are reasonable and obtainable.</td>
<td>2. Supervisors make me feel supported and valued.</td>
</tr>
<tr>
<td>3. I feel I am informed of my job duties to perform my job.</td>
<td>3. I have the opportunity for personal growth in the company.</td>
</tr>
<tr>
<td>4. Admin personal are available and supportive when I need them.</td>
<td>4. I feel self-esteem or self-respect from being at my job.</td>
</tr>
</tbody>
</table>

(continued)
Extrinsic and Intrinsic Motivators BTs Disagree with

<table>
<thead>
<tr>
<th>Extrinsic Motivators BTs Disagree with</th>
<th>Intrinsic Motivators BTs Disagree with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The company's culture has an influence on my job performance.</td>
<td>1. I have the opportunity to career advancement in the company I work for.</td>
</tr>
<tr>
<td>2. The distance that I travel on a daily basis is reasonable.</td>
<td>2. My current work meets the expectation set forth when I first began my job.</td>
</tr>
<tr>
<td>3. I receive great benefits.</td>
<td>3. I feel I have all the tools I need to complete my job.</td>
</tr>
<tr>
<td>4. I work enough hours to meet my needs.</td>
<td>4. I have received adequate training to complete my job.</td>
</tr>
<tr>
<td>5. I have a great relationship with my clinical team.</td>
<td>5. I have a great work and life balance</td>
</tr>
<tr>
<td>6. I feel I am compensated well for the job I am doing.</td>
<td></td>
</tr>
</tbody>
</table>

Research Question 3

What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with children with autism?
The third research question was investigated by conducting a stepwise linear regression analysis R-Squared using the following model:

\[ \text{Burnout} = q2_1 + q2_2 + q2_3 + \ldots + q2_{23} + q2_{24} + \text{intercept}. \]

For example, \(q2_1\) is the response to (1) I feel self-esteem or self-respect from being at my job. \(q2_2\) is the response to (2) I have the opportunity for personal growth in my job, etc.

The technique iteratively introduces independent variables into the model and tests their effect to see if they are significant at 0.05 and if they meet that criteria they remain in the model, otherwise they're rejected. A single regression model was generated; 112 surveys were read, 86 observations surveys were used, 26 observation surveys contained missing data.

These data provided an overall indication of the overall extent of burnout and job satisfaction that resulted from the participants rating the 22 factors in the MBI, and the 24 items in the Job Satisfaction Survey. Further these data provided an overall comparison between job satisfaction and employee retention. The data were analyzed using a stepwise multiple linear regression analysis to determine if there were significant relationships between the three levels of burnout and the job satisfaction factors.

This type of statistical analysis allowed the researcher to analyze multiple independent variables (job satisfaction factors) in order to determine each of their effect on the dependent variable (job burnout/job retention). The analysis provided an understanding of the type of job satisfaction factors that had the greatest effect on job retention. The analysis of the data determined the combination of job satisfaction factors that most substantially affected job retention.
The model was determined to be valid as the effects seen in the model being due to chance were incredibly small (see Table 12). The usual burden of proof that one must meet in the social sciences is $p < .05$ (Salkind, 2014). The $p$ value is the probability of finding the observed results when the null hypothesis of a study question is true. In other words, it is used to determine the significance of the results. The $p$ value in this model was <.0001; therefore, it is highly unlikely the results were due to chance. The df is the degree of freedom. The degree of freedom is a number of independently variable factors affecting the range of states in which a system may exist, in particular. The $F$ ratio is the ratio of two mean square values. If the null hypothesis is true, expect $F$ to have a value close to 1.0 most of the time. A large $F$ ratio means that the variation among group means is more than you'd expect to see by chance. Table 12 below represents the statistical test the researcher’s statistician used to prove the model to be true.

Table 12

*Analysis of Variance*

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>$F$ Value</th>
<th>Pr&gt; $F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>5</td>
<td>160.52935</td>
<td>32.10587</td>
<td>15.62</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Error</td>
<td>62</td>
<td>127.41348</td>
<td>2.05506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>67</td>
<td>287.94283</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The job satisfaction factors significantly decreased job burnout ($F = 15.62, p < .0001$). The $R^2$ was 0.558, indicating the job satisfaction factors explained 56% of the variance in job burnout; essentially, 56% of the variance was captured within the model.
and 4 factors have a correlation to decreasing burnout. In general, the higher the R-squared value, the better the model fits the data.

Five variables were found to have a significant correlation between job satisfaction and job burnout. Questions 2, 10, 11 and 23 have negative coefficients, indicating they vary inversely with burnout. These questions are associated with a decrease in burnout. They were the only questions to show a decrease in burnout when compared to the job satisfaction factors.

Question 2. I have the opportunity for personal growth in my job.
Question 10. I have a great work and life balance.
Question 11. I have received adequate training to complete my job.
Question 23. My job expectations are reasonable and obtainable.

In the Table 13, parameter estimation refers to the process of using sample data to estimate the value of a population parameter (for example, the mean, variance, or t score) or a model parameter. Pr>t gives the p-value for the t-test (the proportion of the t distribution at which DF is greater than the absolute value of your t statistic).
The standard error of the estimate is a measure of the accuracy of the predictions made in the correlation between the two variables. The ratings of each question are listed in the T value in Table 13 below. The T value that was the furthest away from 0 had the highest impact on decreasing job burnout. With these 4 variables, question #10 had the greatest effect on decreasing job burnout with a value of -4.27. Question #23 had the second greatest impact on decreasing job burnout with a value of -3.07, Question #11 had the third most impact with decreasing job burnout, and question 2 with a value of -2.59.
had the least impact on decreasing job burnout among behavior therapists with a value of -2.57.

Table 13

*Coefficients Table of the Burnout Model*

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > |t| | Standardized Estimate |
|----------|----|--------------------|----------------|---------|------|---|-----------------------|
| Intercept | 1  | 4.54532            | 0.92725        | 4.90    | <.0001 | 0 |                      |
| Question 2 | 1  | -0.52906           | 0.20559        | -2.57   | 0.0125 | -0.23292 |                  |
| Question 10 | 1   | -0.66707           | 0.15612        | -4.27   | <.0001 | -0.39088 |                  |
| Question 11 | 1   | -0.42441           | 0.16375        | -2.59   | 0.0119 | -0.23152 |                  |
| Question 23 | 1   | -0.68740           | 0.22417        | -3.07   | 0.0032 | -0.28147 |                  |

No correlation was found between any other job satisfaction factors and the intrinsic/extrinsic motivators that was not reported here. When the researcher’s statistician did the stepwise linear regression, there were no other correlating factors that increased or decreased job burnout among Behavior Therapists.

**Research Question 4**

What improvements to the work place do behavior therapists working with students with autism identify as necessary to improve their job satisfaction and job retention?

Three open-ended questions at the end of the survey asked the participants what the companies could do to increase their job satisfaction and retention:

1. What top 3 improvements can the company you work for implement to improve your satisfaction with your job?
2. What could the company you work for implement to increase the retention of Behavior Therapists?

3. Please list any additional factors that affect your job satisfaction or continued employment as an ABA therapist.

**Job Satisfaction**

Survey Question #1 was addressed by an open survey question at the end of the survey. The research was coded in NVivo and five factors emerged from the data which Behavior Therapists reported as factors companies can implement to improve job satisfaction at the BT level.

Table 14

*Top Five Factors Companies Can Implement to Improve Job Satisfaction at the BT Level.*

<table>
<thead>
<tr>
<th>Factor</th>
<th># of BTs reporting this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pay</td>
<td>23 BTs</td>
</tr>
<tr>
<td>2. Schedule</td>
<td>16 BTs</td>
</tr>
<tr>
<td>3. Training</td>
<td>15 BTs</td>
</tr>
<tr>
<td>4. Benefits/incentives</td>
<td>15 BTs</td>
</tr>
<tr>
<td>5. Support from Supervisor and admin. Staff</td>
<td>14 BTs</td>
</tr>
</tbody>
</table>
Table 15

The Lowest Factors That a Company Could Implement to Improve Job Satisfaction

1. What top 3 improvements can the company you work for implement to improve your satisfaction with your job?

<table>
<thead>
<tr>
<th>Factor</th>
<th># of BTs reporting this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Client Information</td>
<td>4 BTs</td>
</tr>
<tr>
<td>2. Drive-time</td>
<td>4 BTs</td>
</tr>
<tr>
<td>3. Job Advancement</td>
<td>2 BTs</td>
</tr>
<tr>
<td>4. Job performance Evaluations</td>
<td>1 BT</td>
</tr>
</tbody>
</table>

Job Retention

Survey Question #2 was addressed by an open survey question at the end of the survey. The research was coded in NVivo and seven factors emerged from the data which Behavior Therapists reported as factors companies can implement to improve job retention at the BT level.

Table 16

Top Five Factors as Reported by BTs That Companies Should Implement

1. What could the company you work for implement to increase the retention of Behavior Therapists?

<table>
<thead>
<tr>
<th>Factor</th>
<th># of BTs reporting this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pay</td>
<td>18 BTs</td>
</tr>
<tr>
<td>2. Benefits/Incentives</td>
<td>12 BTs</td>
</tr>
<tr>
<td>3. Training</td>
<td>11 BTs</td>
</tr>
<tr>
<td>4. Schedule</td>
<td>10 BTs</td>
</tr>
<tr>
<td>5. Supervisor Support/admin. Support</td>
<td>9 BTs</td>
</tr>
</tbody>
</table>
Table 17

The Lowest Factors That a Company Could Implement to Improve Job Retention

1. What could the company you work for implement to increase the retention of Behavior Therapists?

<table>
<thead>
<tr>
<th>Factor</th>
<th># of BTs reporting this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consistent communication</td>
<td>5 BTs</td>
</tr>
<tr>
<td>2. Benefits/Incentives</td>
<td>5 BTs</td>
</tr>
</tbody>
</table>

Additional Factors

For open-ended survey question 3, the data were coded in NVivo and seven factors emerged that Behavior Therapists reported as additional factors that affect job satisfaction and remaining in their job as a Behavior Therapist. Seven factors that participants reported affect their job satisfaction and continuing employment emerged from the analysis.

Table 18

Top Factors as Reported by BTs that Affect Job Satisfaction and continuing employment

1. Please list any additional factors that affect your job satisfaction or continued employment as an ABA therapist.

<table>
<thead>
<tr>
<th>Factor</th>
<th># of BTs reporting this factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Schedule</td>
<td>13 BTs</td>
</tr>
<tr>
<td>2. Support from a Supervisor</td>
<td>12 BTs</td>
</tr>
<tr>
<td>3. Client information/Needs</td>
<td>12 BTs</td>
</tr>
<tr>
<td>4. Benefits/incentives</td>
<td>8 BTs</td>
</tr>
<tr>
<td>5. Pay</td>
<td>7 BTs</td>
</tr>
<tr>
<td>6. Company Support</td>
<td>6 BTs</td>
</tr>
<tr>
<td>7. Training</td>
<td>5 BTs</td>
</tr>
</tbody>
</table>
Table 19

*Overall Factors that affect Job Retention and Job Satisfaction*

<table>
<thead>
<tr>
<th>Overall factors that affect job retention and job satisfaction</th>
<th>Frequency in the open-ended questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>48 times</td>
</tr>
<tr>
<td>Schedule</td>
<td>39 times</td>
</tr>
<tr>
<td>Supervisor Support</td>
<td>35 times</td>
</tr>
<tr>
<td>Training</td>
<td>31 times</td>
</tr>
<tr>
<td>Benefits</td>
<td>28 times</td>
</tr>
</tbody>
</table>

**Pay**

Pay is defined by the researcher, for coding purposes, as satisfaction with pay level, satisfaction with pay structure, satisfaction with pay raises. Pay was the most frequent factor reported to affect job satisfaction and job retention. Better wages for the position and pay raise were reported by the Behavior Therapists 48 times throughout the open-ended questions. To increase job satisfaction, 23 BTs reported pay to be a factor companies can implement. Some examples of these statements are as follows:

1. “Better Pay” was stated by eight BTs in the 23 responses.
2. “Opportunities to raise our wages based on length we have been at the company,” stated by 1 BT.
3. “The pay is low. There should be a raise program. Work for 6 months with a good review get a 1/hr. raise. Work for a year and get another $1/hr. Also, paid # of paid vacation days is very low,” stated by 1 BT.
4. “Monetary incentives the longer you work with the company,” stated by 1 BT.

To increase job retention at the BT level, 18 BTs believe that companies can increase pay and implement consistent pay raises. Some of the statements were as follows:
1. “Higher pay” was stated by seven BTs in the 18 responses.

2. “Better pay for significantly more difficult clients,” stated by 1 BT.

3. “Wages (increase in pay and more reliable wages/income to keep up with the living costs like rent, food, etc.),” stated by 1 BT.

5. “Raise wage based on length of time with the company,” stated by 1 BT.

As an additional factor, 7 BTs reported pay as a factor to affect job satisfaction or a BT’s continued employment in an ABA company. Some of the statements were as follows:

1. “Pay” was stated by five BTs in the 7 responses.

2. “Hourly pay (the wage is low and getting enough hours is tough and unreliable, especially when clients cancel since I don’t get paid=job dissatisfaction),” stated by 1 BT.

3. Companies have significantly lowered the wages over the past 4 years for behaviors,” stated by 1 BT.

Jurgensen (1978) found that pay satisfaction was the most important job attribute in a study of more than 10,000 employees. In commenting on pay-for-performance systems, Locke, Ferren, McCaleb, Shaw, and Denny (1980) noted, “No other incentive or motivational technique comes close to money” (p. 381). At a minimum, it is clear that pay is of fundamental importance to most employees, and it therefore stands to reason that organizations with employees who have positive affective reactions toward their pay will perform more effectively than those with employees with less positive reactions.
Schedule

Schedule is defined by the researcher as more or less hours, canceled sessions, or flexibility with hours for coding purposes. Schedule was reported as a factor 39 times in the open-ended questions. Schedule was not a reported factor to affect job retention in the open-ended questions. To improve job satisfaction, 16 BTs feel addressing schedule needs would affect job satisfaction. Some examples of these statements are listed below:

1. ‘More hours” were stated by five BTs in the 16 responses.
2. “Decrease the gap between clients (often a month passes before a new client is given regardless of how much notice was given for more hours)” stated by 1 BT.
3. “Have other options to make up client cancelations,” stated by 1 BT.
4. “Flexible with schedules. M-F is not always easy to do for students,” stated by 1 BT.
5. “Steady income for hourly employees when clients cancel (due to illness, parent cancel, etc.)” stated by 1 BT.

As an additional factor, 13 BTs reported schedule as the most frequent factor to affect job satisfaction or a BT’s continued employment in an ABA company. Some examples of the statements were as follows:

1. “Client Cancelations” was reported by five BTs in the 13 responses.
2. “Flexibility with my schedule was reported 3 times,” stated by 1 BT.
3. “Provide substituted work when a client cancels (e.g. subbing, office work/making stimuli for clients),” stated by 1 BT.
4. “Building a good rapport with the Scheduling Coordinator,” stated by 1 BT.
Lee, B. Y., Wang, J., & Weststar, J. (2015) conducted a study that examined the effect of work hour congruence on employee job satisfaction and absenteeism using a large, longitudinal sample from the Canadian Workplace and Employee Survey (WES). They found that addressing the hour mismatch for those who wanted more hours had no effect on job satisfaction. This indicated that other factors related to part-time or reduced hours could perpetuate feelings of job dissatisfaction despite the employee having ostensibly asked for those hours to increase their schedule. As noted above, this could be related to the job creep that often occurs with part-time work as well as other documented challenges such as lack of belonging, assumed lack of commitment, being overlooked for choice work assignments, and reduced rewards and recognition (Tilly 1996; Lee and McCann 2006; Weststar 2011).

**Supervisor/admin Support**

Supervisor/admin support is defined by the researcher as communication and support given from the direct supervisor and administrators within the company. Supervisor support was reported 35 times in the open-ended questions. To improve job satisfaction, 14 BTs felt supervisor support has an effect on job satisfaction. Some examples of the statements are as follows:

1. “More Support” was reported by six BTs in the 14 responses.
2. “Quicker responses to my questions via email,” stated by 1 BT.
3. “Supervisors make me valued as an employee,” stated by 1 BT.
4. “Opportunity to shadow my supervisors,” stated by 1 BT.
5. “I work with 2 Clinical Directors and a Program Supervisor. That’s a lot of bosses but none of them have an overall picture of me as an employee and my
schedule. I wish I had one supervisor that I could meet with once a month and email who would check in with me about my progress, job satisfaction, and career goals overall,” stated by 1 BT.

As an additional factor that affects job satisfaction and job retention, 12 BTs reported supervisor support as one of those factors. Some examples of those statements are as follows:

1. “Appreciation for the work I do from my supervisor” was reported by 3 BTS in the 12 responses.
2. “When talking to certain clinical team members, I feel I am not heard and feel like I cannot get a word in,” stated by 1 BT.
3. “The support and clarity of instructions and feedback my clinical team provides is a crucial part of my job satisfaction. One of my clinical teams is much more supportive, clear and communicative than my other team. This directly relates to how confident I feel in my competency and how motivated I feel to be the best at my job and stay retained,” stated by 1 BT.
4. “I get stuck doing work that is not in my original job description. Ex. Being alone with a client, dealing with body fluids (pee, blood, etc.) dressing/undressing clients. Even after communicating this with my supervisors and parents. There is a feeling of “If we already told the parents and they won’t comply there’s not much we can do,” stated by 1 BT.
5. “Relations with my supervisor,” stated by 1 BT.

To improve job retention, 9 BTs reported supervisor support as a factor that impacts job retention. Some examples of the statements are as follows:
1. “More support” was reported by three BTs in the 9 responses.

2. “Better supervision and emotional support from clinical team especially when working with a challenging client. I want to feel like I am an asset to the company,” stated by 1 BT.

3. “There is an overall culture that seems to undervalue the BTs and treat them as disposable. It’s almost like my CDs and PS assume I’ll quit soon. BTs should be valued more in words and pay,” stated by 1 BT.

4. “More positive reinforcement!” stated by 1 BT.

5. “Being treated with as much respect as supervisors!” stated by 1 BT.

It is also notable that the variable of perceived organizational support may also be playing a role in an employee’s level of cynicism (DeConinck & Johnson, 2009). A study by Kazemi, Shapiro and Kavner in 2014 was done to determine variables that best predicted BTs’ turnover intentions. They found that about 38% of their participants reported they were highly or somewhat likely to leave their jobs, compared to about 17.9% of the total workforce (Boushey & Glynn, 2012). In the study, they also explained that approximately 38% of the variance in turnover intentions was based on participants’ self-reported satisfaction with their training, supervision, remuneration, and different aspects of their job (e.g., co-workers and working conditions). The variables that were identified as predictors of turnover for BTs are similar to what Boushey & Glynn (2012) reported in special education teachers, social workers, and residential staff. Supervisory dimensions that include lack of emotional support, lack of interest in or assistance with employees’ work, and infrequent constructive feedback are factors that are consistently
related to turnover intentions of both special education teachers and social workers (Billingsley, 1993, 2004; Littrell & Billingley, 1994).

**Training**

Training is defined by the researcher as initial training, ongoing training once Behavior Therapists are in the field for coding purposes. Training and ongoing training reported by the Behavior Therapists 31 times throughout the open-ended questions. To improve job satisfaction, 15 BTs feel addressing training needs would affect job satisfaction. Some examples of these statements are listed below:

1. “More training or an increase in training” was reported by eight BTs in the 31 responses.
2. “Monthly training opportunities or programs to sharpen my skills in different areas of my position. (i.e. graphing data),” stated by 1 BT.
3. “More training when first hired that coincides with what you're experiencing as you begin session with your first client (because I forgot a lot of what I learned since I hadn’t started with my client and then had only just started pairing and playing with them by the time training was over,” stated by 1 BT.
4. “Provide more training regarding parent training and involvement,” stated by 1 BT.
5. “Provide an opportunity to shadow Program Supervisors in the field,” stated by 1 BT.

To increase job retention, 11 BTs reported training as a factor for ABA companies to implement. Some of the examples of statements are as follows:

1. “Provide classes to be an RBT,” stated by 1 BT.
2. “Bi-monthly group training for those who may need it,” stated by 1 BT.

3. “Training (more as well as training that coordinates with what new hires will experience as they progress the first few weeks on the job),” stated by 1 BT.

4. “Send out quizzes (maybe on a survey monkey-like website),” stated by 1 BT.

5. “One on one training,” stated by 1 BT.

As an additional factor that affects job satisfaction and job retention, 5 BTs reported training as one of those factors. Some examples of those statements are as follows:

1. “Ongoing training” was reported by two BTs in the 5 responses.

2. “Training support,” stated by 1 BT.

3. “Additional job training,” stated by 1 BT.

4. “Lack of training especially for a school client. A lot of training is needed for a school client, but yet I received extremely minimal training and resulted in a lot of problems and stress. The teacher expects me to have more training but yet I have completely no control over it,” stated by 1 BT.

Employee attitudes towards training (Bartlett, 2001) and training effectiveness (Kontoghiorghes and Bryant, 2004) have been found to be positively related to organizational commitment (Igbaria and Greenhaus, 1992; Smeenk et al., 2006).

Chandler and McEvoy (2000) and Dalziel (2010) noted that companies that invested in the training of their employees and engaged in regular performance appraisal were likely to benefit from lower employee turnover with lower turnover costs. Moreover, Dalziel (2010) suggested that staff retention is greatly enhanced if companies offer a learning
environment and career paths that support staff in their personal development and recognize their learning attainments.

**Benefits**

Benefits was defined by the researcher by medical, dental, vision plans as well as sick and vacation time for coding purposes. Benefits/Incentives were reported by the Behavior Therapists 28 times throughout the open-ended questions. In regards to job satisfaction, 15 BTs reported benefits/incentives as a factor. Some examples of the statements were as follows:

1. “Make extended vacation time attainable for direct staff!!! 2 days is not a vacation and even that’s a hassle to find coverage for. I see CDs take at least week long vacation all the time, we need the same for direct work because it’s most exhaustive,” stated by 1 BT.

2. “Some holiday pay offered. It is hard to make a living when your income is cut continually due to your client’s vacations or extracurricular activities,” stated by 1 BT.

3. “Financial support for continuing education compensated by years of dedication,” stated by 1 BT.

4. “Provide a bonus structure or motivating incentives,” stated by 1 BT.

5. “Expanding options for medical insurance,” stated by 1 BT.

As an additional factor that affects job satisfaction and job retention, 8 BTs reported benefits/incentives as one of those factors. Some examples of those statements are as follows:

1. “Benefits for part time employees,” stated by 1 BT.
2. “It is difficult taking extended vacation for direct 1:1 staff (ex. At least a week); subs are not easily attained,” stated by 1 BT.
3. “Unable to take time off,” stated by 1 BT.
4. “I want to become a BCBA but I’m not sure if I can get supervised hours,” stated by 1 BT.
5. “Benefits,” stated by 1 BT.

To increase job retention, 5 BTs reported benefits/incentives as a factor for ABA companies to implement. Some of the examples of statements are as follows:

1. “Competitive benefits,” stated by 1 BT.
2. “Make it easier to take time off,” stated by 1 BT.
3. “Partial benefits for part time workers,” stated by 1 BT.
4. “Make extended vacation time more attainable,” stated by 1 BT.
5. “Better benefits,” stated by 1 BT.

In examining the relationship between employee benefit programs and retention, a model was examined in regard to the effect of monetary worth (an objective factor) of employee stock options programs and the feeling of participating in company management through this (a subjective factor), which may lead to withdrawal cognition and actual spontaneous resignation by way of multi-step awareness, i.e., satisfaction with the system, overall job satisfaction, and organizational commitment (Buchko 1993). In short, this model makes it clear that both the objective and subjective factors are related to retention, and that job satisfaction is important as an intermediary factor.
Research Question 1

What factors do Behavior Therapists working with children with autism identify as important regarding job satisfaction and job retention?

Research Question 1 is a summary of research questions 2-4 of this dissertation. The analysis of the data from research questions 2-4 identified factors that affect job satisfaction and job retention. Those factors are summarized here in Research Question 1. The following is a summary of all the factors that affect job satisfaction at the Behavior Therapist level.

Intrinsic and Extrinsic Factors

Research Question 2 identified the intrinsic and extrinsic motivators that BTs rated for importance related to job satisfaction and burnout (job retention) respectively. The analysis of the data identified 7 intrinsic and 6 extrinsic motivators that were determined to be important based on pre-determined criteria. The intrinsic and extrinsic motivator statements each are constructed around an embedded factor related to job satisfaction and retention. Table 20 summarizes the intrinsic and extrinsic motivator statements found to be important and the embedded factor contained within each statement.

Table 20

Top Job Satisfaction Factors that Affect Job Burnout BT's Agreed With

<table>
<thead>
<tr>
<th>Embedded Factor</th>
<th>Intrinsic Motivators BTs agree with</th>
<th>Embedded Factor</th>
<th>Extrinsic Motivators BTs agree with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>1. I have great communication with my clinical team.</td>
<td>Support</td>
<td>1. I feel I am respected and treated fairly by my superiors.</td>
</tr>
</tbody>
</table>

(continued)
Support from supervisors and the company was reported 5 times in the top intrinsic and extrinsic factors. Supervisor support was also reported as one of the top 5 factors that were reported in the open-ended questions. Job Responsibilities was also listed as extrinsic factors that were important for job satisfaction and job retention. Life balance was reported as an important intrinsic factor for a Behavior Therapist that works in an ABA company. Kazemi, Shapiro & Kavner (2014) found that satisfaction with training, supervision, pay, and different aspects of their job were statistically significant correlates of turnover intentions such that as satisfaction decreased, intent to turnover increased. Other factors consistently related to turnover intentions of both special
education teachers and social workers were supervisory dimensions, including lack of emotional support, lack of interest in or assistance with employees’ work, and infrequent constructive feedback (Billingsley, 1993, 2004; Littrel & Billingsley, 1994).

Table 21

Top Job Satisfaction Factors that Affect Job Burnout BT’s Disagreed With

<table>
<thead>
<tr>
<th>Embedded Factor</th>
<th>Intrinsic Motivators BTs Disagree with</th>
<th>Embedded Factor</th>
<th>Extrinsic Motivators BTs Disagree with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>8. I have the opportunity to career advancement in the company I work for.</td>
<td>Benefits</td>
<td>9. I receive great benefits.</td>
</tr>
<tr>
<td>Training</td>
<td>9. My current work meets the expectation set forth when I first began my job.</td>
<td>Schedule</td>
<td>10. I work enough hours to meet my needs.</td>
</tr>
<tr>
<td>Training</td>
<td>11. I have received adequate training to complete my job.</td>
<td>Supervisor support</td>
<td>11. I have a great relationship with my clinical team.</td>
</tr>
<tr>
<td>Life Balance</td>
<td>12. I have a great work and life balance</td>
<td>Pay</td>
<td>12. I feel I am compensated well for the job I am doing.</td>
</tr>
</tbody>
</table>

The top 5 factors BTs reported in the open-ended questions—pay, schedule, support, training, and benefits, were also represented in the table above as extrinsic and intrinsic factors the BTs disagreed with. The statements were written as a positive statement therefore the BTs disagreed with the statement as a factor the ABA companies were missing.
Table 22

*Job Satisfaction Factors that Affect Job Burnout (Job Retention)*

<table>
<thead>
<tr>
<th>Embedded Factor</th>
<th>Job Satisfaction Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Balance</td>
<td>1. I have the opportunity for personal growth in my job.</td>
</tr>
<tr>
<td>Life Balance</td>
<td>2. I have a great work and life balance.</td>
</tr>
<tr>
<td>Training</td>
<td>3. I have received adequate training to complete my job.</td>
</tr>
<tr>
<td>Job Responsibilities</td>
<td>4. My job expectations are reasonable and obtainable.</td>
</tr>
</tbody>
</table>

The cost of professional burnout to organizations is high: potential absenteeism, low employee morale, turnover, and impaired professional performance (Waugh & Judd, 2003). Piko (2006) explored the relationships among burnout, role conflict, job satisfaction, and psychosocial health among health care workers at two major hospitals in Hungary and found that scores on all domains of burnout, especially emotional exhaustion, were significantly correlated with higher levels of job dissatisfaction. A study by Kazemi, Shapiro and Kavner in 2014 was done to determine variables that best predicted BTs’ turnover intentions. They found that about 38% of their participants reported they were highly or somewhat likely to leave their jobs, compared to about 17.9% of the total workforce (Boushey & Glynn, 2012). In the study they also explained that approximately 38% of the variance in turnover intentions was based on participants’ self-reported satisfaction with their training, supervision, remuneration, and different aspects of their job (e.g., co-workers and working conditions). The variables that were identified as predictors of turnover for BTs are similar to what Boushey & Glynn (2012) reported for special education teachers, social workers, and residential staff.
Table 23

*Five Other Factors that affect Job Retention and Job Satisfaction*

<table>
<thead>
<tr>
<th>Overall factors that affect job retention and job satisfaction</th>
<th>Frequency in the open-ended questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>48 times</td>
</tr>
<tr>
<td>Schedule</td>
<td>39 times</td>
</tr>
<tr>
<td>Supervisor Support</td>
<td>35 times</td>
</tr>
<tr>
<td>Training</td>
<td>31 times</td>
</tr>
<tr>
<td>Benefits</td>
<td>28 times</td>
</tr>
</tbody>
</table>

Jurgensen (1978) found that pay satisfaction was the most important job attribute in a study of more than 10,000 employees. In commenting on pay-for-performance systems, Locke, Ferren, McCaleb, Shaw, and Denny (1980) noted, “No other incentive or motivational technique comes close to money” (p. 381). Lee, B. Y., Wang, J., & Weststar, J. (2015) conducted a study that examined the effect of work hour congruence on employee job satisfaction and absenteeism using a large, longitudinal sample from the Canadian Workplace and Employee Survey (WES). They found that addressing the hour mismatch for those who wanted more hours had no effect on job satisfaction. This indicated that other factors related to part-time or reduced hours could perpetuate feelings of job dissatisfaction despite the employee having ostensibly asked for those hours to increase their schedule. The variables that were identified as predictors of turnover for BTs are similar to what Boushey & Glynn (2012) reported in special education teachers, social workers, and residential staff. Supervisory dimensions which include lack of emotional support, lack of interest in or assistance with employees’ work, and infrequent constructive feedback are factors that are consistently related to turnover intentions of both special education teachers and social workers (Billingsley, 1993, 2004; Littrell &
Employee attitudes towards training (Bartlett, 2001) and training effectiveness (Kontoghiorghes and Bryant, 2004) have been found to be positively related to organizational commitment (Igbaria and Greenhaus, 1992; Smeenk et al., 2006). Chandler and McEvoy (2000) and Dalziel (2010) noted that companies that invested in the training of their employees and engaged in regular performance appraisal were likely to benefit from lower employee turnover with lower turnover costs. In examining the relationship between employee benefit programs and retention, a model was examined in regard to the effect of monetary worth (an objective factor) of employee stock options programs and the feeling of participating in company management through this (a subjective factor), which may lead to withdrawal cognition and actual spontaneous resignation by way of multi-step awareness, i.e. satisfaction with the system, overall job satisfaction, and organizational commitment (Buchko 1993). In short, this model makes it clear that both the objective and subjective factors are related to retention, and that job satisfaction is important as an intermediary factor.

**Summary**

Chapter IV presented the findings and results of this study from the survey that was conducted. The data were analyzed to provide answers to the research questions. This collection of data and subsequent analysis developed a base of information regarding factors that affect job retention and job satisfaction among Behavior Therapists working in in-home ABA companies. Table 24 presents a summary of the research questions and findings.
### Table 24

**Summary of Findings**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Results</th>
</tr>
</thead>
</table>
| **1. What factors do Behavior Therapists working with children with autism identify as important regarding job satisfaction and job retention?** | **1. Pay**  
2. Schedule  
3. Support  
4. Training  
5. Benefits  
6. Life Balance  
7. Job Responsibilitiesbles                   |

<table>
<thead>
<tr>
<th>Intrinsic Motivators BTs agree with</th>
<th>Extrinsic Motivators BTs agree with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have great communication with my clinical team.</td>
<td>1. I feel I am respected and treated fairly by my superiors.</td>
</tr>
<tr>
<td>2. Supervisors make me feel supported and valued.</td>
<td>2. My job expectations are reasonable and obtainable.</td>
</tr>
<tr>
<td>3. I have the opportunity for personal growth in the company.</td>
<td>3. I feel I am informed of my job duties to perform my job.</td>
</tr>
<tr>
<td>4. I feel self-esteem or self-respect from being at my job.</td>
<td>4. Admin personal are available and supportive when I need them.</td>
</tr>
<tr>
<td>5. I have the opportunity to be creative at my job.</td>
<td>5. I have the opportunity to participate in the determination of methods, procedures and goals for the client’s programs.</td>
</tr>
<tr>
<td>6. I have a great relationship with my clinical team.</td>
<td>6. I receive the right amount of supervision.</td>
</tr>
<tr>
<td>7. I feel worthwhile and accomplished at my job.</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Results</th>
</tr>
</thead>
</table>
| 2. What is the relationship between the level of burnout to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism? | **Intrinsic Motivators BTs disagree with**
8. I have the opportunity to career advancement in the company I work for.  
11. I have received adequate training to complete my job.  
12. I have a great work and life balance  
11. I have a great relationship with my clinical team.  
12. I feel I am compensated well for the job I am doing.  
**Extrinsic Motivators BTs disagree with**
9. My current work meets the expectation set forth when I first began my job.  
9. I receive great benefits.  
10. I work enough hours to meet my needs.  |
| 3. What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with students with autism? | **Factors that Decrease Job Burnout**
1. I have a great work life balance.  
2. My job expectations are reasonable and obtainable.  
3. I have received adequate training to complete my job.  
4. I have the opportunity for personal growth in my job.  |
| 4. What improvements to the work place do Behavior Therapists working with students with autism identify as necessary to improve their job satisfaction and job retention? | **Improvement Factors**
2. Better schedule that meets my needs.  
3. More support from director supervisors and admin staff.  
4. A more robust training initially and ongoing.  
5. Benefits or better benefits.  |
From the survey, 7 factors emerged as factors that affect job retention and job satisfaction at the BT level: Pay, Schedule, Support, Training, Benefits, Life Balance, and Job Responsibilities. Training and Benefits were two common factors that were found throughout all four research questions. Pay, Schedule, Support, were found in research questions 1, 2 and 4. Life Balance and Job Responsibilities were factors found in research questions 1, 2 and 3. Demographic data that was also collected in the surveys was analyzed, and resulted in 74.23% of participants were female and 25.77% of participants were male. 54% of the participants have been employed with their current company for less than 12 months. This is an issue to address with job retention in the ABA industry.

Chapter V presents a summary of the major findings from the analysis in Chapter IV, conclusions resulting from the findings, implications for action (recommendations for further action), recommendations for further research, and concluding remarks and reflections from the researcher.
CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Chapter I introduced the background and rationale for the current study. Chapter II provided a review of literature, focusing on the concept of autism, ABA, job retention, and job satisfaction. Chapter III discussed the study’s research design and methodology. Chapter IV presented the data analysis and results for the three research questions analyzed in this study. This chapter begins with a brief summary of the study purpose, research questions, methodology, population, and sample. Following this, the chapter focuses on the major findings of this research. Conclusions regarding this topic are drawn and implications for further action, including suggestions for additional research, are discussed. The chapter concludes with remarks and reflections from the researcher.

Purpose Statement

The purpose of this relational study was to identify and compare the factors related to job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A second purpose of the study was to determine the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism. A further purpose of the study is to describe the improvements in the work place that behavior therapists working with students with autism identified as necessary to increase their job satisfaction and job retention.

Research Questions

1. What factors do Behavior Therapists working with children with autism identify as important regarding job satisfaction and job retention?
2. What is the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?

3. What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with students with autism?

4. What improvements to the work place do behavior therapists working with students with autism identify as necessary to improve their job satisfaction and job retention?

**Research Methods and Data Collection Procedures**

Quantitative methods were employed to connect the purpose to the process in investigating the factors that are important to job retention and job satisfaction, the relationship between these factors, and the improvements employers can make to impact job retention and job satisfaction. A four-part survey was administered in order to address the research questions in this study. Part 1 included the Maslach Burnout Inventory Survey (MBIS) which was used to measure the participants’ perceptions of the factors that are important to job retention. The survey includes 22 items that ask the participant to rate factors affecting job satisfaction using a 6 point Likert Scale. Part 2 was a 24-item job satisfaction survey created to measure self-perceived factors related to job satisfaction identified in two categories: intrinsic and extrinsic motivation factors. Extrinsic factors were defined as those external benefits provided to the professional by the facility or organization. Intrinsic factors were defined as self-motivators and personal growth. Part 3 the researcher provided three open-ended survey items for the participants
to describe improvements to the workplace that can be made to increase their job satisfaction and job retention respectively. Open-ended questions provide an opportunity for participants to respond without being required to choose an option. Part 4 of the survey consisted of the demographic data sought by the researcher. This included gender, months of experience, ethnicity and age.

Behavior Therapists were given access to the online survey via email. The researcher safeguarded the participant’s confidentiality and anonymity. Through the Informed Consent Form, participants were advised that participation in this study was strictly voluntary and there were no known or anticipated risks to participating in this study. The data collected was kept in a secure location and was destroyed once the research was completed and the final dissertation was approved.

Population

The population in this study included Behavior Therapists servicing children with autism. In the Bay Area, there are over 50 ABA companies with an estimated 2,000 BTs employed in these companies (Ed Supports, 2015). Due to the fact that they are privately held companies, and are competitors, ABA companies do not publish data on the employees. Therefore, it is impossible to determine the exact numbers of BTs employed in the Bay Area.

ABA companies hire Behavior Therapists (BT) as entry-level employees. ABA therapists are the employees that work directly in the home setting with the children diagnosed with autism. They implement ABA programs working with the clinical team and the families in a 1:1 setting. They are a crucial part of the clinical team. Services cannot be provided to the child diagnosed with autism unless there is a BT hired and
placed to work with the child in the home setting. If a BT is not placed in the home setting, services cannot be provided. This makes Behavior Therapists an important factor to the success of any ABA company.

Due to the high number of ABA companies in the Bay Area, the researcher reduced the number for this study to five ABA companies in the Bay Area. The three criteria used to select these five ABA companies included:

1. Fifty or more Behavior Therapists employed in the ABA company,
2. The ABA company was located in the Bay Area, CA.
3. The ABA company was willing to allow their Therapists to participate in this study.

There are 150 ABA therapists in three companies who meet these criteria. Five companies initially indicated their interest in participating in the research; however, when the study began only 3 of the 5 decided to participate. This is the target population identified for this study representing 15% of the total population of ABA therapists in the Bay Area. Consequently, the target population of this study is of sufficient size to offer information and insight that may help ABA companies with understanding and improving job satisfaction and job retention among ABA therapists.

**Sample**

Given that the target population contains 150 Behavior Therapists, the researcher chose a confidence level of 95% and a precision level of ±5%, indicating that the sample population should be approximately 109 BTs. Using sample size calculators available to the public, a significant sample size related to the population being studied provides rigor to the study (Creswell, 2007).
Major Findings

A summary of key findings that emerged from the data analysis in Chapter IV is presented in the following sections. The findings resulted from the survey data are reported in Table 25 and were organized by each research question. The seven factors found in research question number 1 were also found in research questions 2-4. In research question 2, there were factors that BTs agreed with and factors BTs disagreed with. Research question 3 resulted in four factors that affect job burnout, and research question 4 resulted in five additional factors companies can implement to address job satisfaction and job retention at the BT level.

Table 25.

Summary of Findings

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. What is the relationship between the level of burnout to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?</td>
<td>Intrinsic Motivators BTs agree with 1. I have great communication with my clinical team. 2. Supervisors make me feel supported and valued. Extrinsic Motivators BTs agree with 1. I feel I am respected and treated fairly by my superiors. 2. My job expectations are reasonable and obtainable.</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. I have the opportunity for personal growth in the company.</td>
<td>4. I feel self-esteem or self-respect from being at my job.</td>
</tr>
<tr>
<td>5. I have the opportunity to be creative at my job.</td>
<td>6. I have a great relationship with my clinical team.</td>
</tr>
<tr>
<td>7. I feel worthwhile and accomplished at my job.</td>
<td>5. I have the opportunity to participate in the determination of methods, procedures and goals for the client’s programs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intrinsic Motivators BTs disagree with</th>
<th>Extrinsic Motivators BTs disagree with</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. I have the opportunity to career advancement in the company I work for.</td>
<td>9. My current work meets the expectation set forth when I first began my job.</td>
</tr>
<tr>
<td>11. I have received adequate training to complete my job.</td>
<td>12. I have a great work and life balance</td>
</tr>
<tr>
<td>12. I receive the right amount of supervision.</td>
<td>10. I work enough hours to meet my needs.</td>
</tr>
</tbody>
</table>

**Job Satisfaction Factors that Decrease Job Burnout**

1. I have a great work life balance.
2. My job expectations are reasonable and obtainable.
3. I have received adequate training to complete my job.
4. I have the opportunity for personal growth in my job.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. What improvements to the work place do Behavior Therapists working with students with autism identify as necessary to improve their job satisfaction and job retention?</td>
<td>1. Better Pay.</td>
</tr>
<tr>
<td></td>
<td>2. Better schedule that meets my needs.</td>
</tr>
<tr>
<td></td>
<td>3. More support from director supervisors and admin staff.</td>
</tr>
<tr>
<td></td>
<td>4. A more robust training initially and ongoing.</td>
</tr>
<tr>
<td></td>
<td>5. Benefits or better benefits.</td>
</tr>
</tbody>
</table>

Findings

What factors do Behavior Therapists working with children with autism identify as important regarding job satisfaction and job retention?

In Table 26 below seven factors are listed and which research question they were found in. All the findings in Table 25 were broken down by factors in Table 26 below. Across all four research questions, seven common factors emerged from the data (Table 19). Pay, Schedule, Support, Training, Benefits, Life Balance and Job Responsibilities were the 7 top factors BTs reported as important regarding job satisfaction and job retention. These seven factors were not found in each research question. Each factor was found in at least three research questions.
Table 26.

*Seven Common Factors that Emerged from the Data*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Pay</th>
<th>Schedule</th>
<th>Support</th>
<th>Training</th>
<th>Benefits</th>
<th>Life Balance</th>
<th>Job Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What factors do Behavior Therapists working with students with autism identify as important regarding job satisfaction and job retention?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. What is the relationship between the level of burnout related to job retention, and the intrinsic and extrinsic level of motivation related to job satisfaction as perceived by Behavior Therapists working with students with autism?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. What is the relationship between job satisfaction factors and job burnout factors related to job retention identified by Behavior Therapists working with students with autism?</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued)
Training and benefits were factors found in all four research questions. Pay, schedule, support, life balance and job responsibilities were found in three out of four research questions. All seven factors are listed below, and in which research question they were found.

**Pay**

Rate of pay was reported in research question one, two and four as a factor which impacts job satisfaction and job retention. Rate of pay, higher pay and/or pay raises was the number one factor that affects job retention and job satisfaction that appeared in the open-ended questions at the end of the survey. Listed below are the findings from each research question.

- Research question 1- Pay was listed as the number one factor that affected job satisfaction and job retention.
- Research question 2 - “rate of pay” was an extrinsic motivator that BT’s reported as a factor; and said that they are not well compensated for the work that they do.
Research question 4 - “Better pay” was reported as the number one factor that companies could implement to improve job satisfaction and job retention at the BT level.

Alternatively, BT’s responses on the job satisfaction questionnaire indicated that future research should evaluate the effects of creating an infrastructure that provides opportunities for advancement, for employees to apply their skills, and for employees to feel that their hard work or high quality work is noticed. This finding is in line with previous researchers who have reported that although pay matters, simply paying people more is not the best way to attract, keep, or motivate talented employees (Hale, 1998). Future research can examine if goal setting, choice of pay plans, group pay-for-performance, and other similar organizational behavioral strategies that have been reliably correlated with pay satisfaction (see for example, Hollensbe & Guthrie, 2000) can increase BTs’ satisfaction with their pay.

**Schedule**

Schedule is defined as more or less hours, canceled sessions, or flexibility with hours. Schedule was reported as a factor in research questions one, two and four. Listed below are the findings from each research question.

- **Research question 1**- Schedule was the second highest factor reported that affected job retention and job satisfaction.

- **Research question 2**- “having enough hours to meet my needs” was reported as an extrinsic factor which affected job retention and job satisfaction.
• Research question 4- “A better schedule that fits my needs” was reported as a factor that companies can implement to have an impact on job satisfaction and job retention.

Other researchers have found that when employees could not work sufficient hours to achieve financial stability they experienced reduced job satisfaction (McKee-Ryan and Harvey 2011). For instance, a primary reason for working additional hours is to increase income or improve work status (Wilkins 2007), while a primary reason to work fewer hours is burnout or work–life conflict (Golden 2006; Weststar 2011). With these differing goals, motivations and expectations, it follows that people who wish to work more hours may exhibit different workplace attitudes and behaviors as a result of their mismatch than people who wish to work fewer hours.

**Support**

Supervisor support is defined as communication and feedback between the Behavior Therapist and the supervisor, as well as feedback and communication between the Behavior Therapist and other employees of the company. Support was found as a factor in research questions 1, 2, and 4. Listed below are the findings from each research question.

• Research question 1- Support was the third highest factor reported that affected job retention and job satisfaction.

• Research question 2- “having a great relationship with the BT’s clinical team” and “having their current work meet the expectations set forth when they first began the job” were both extrinsic factors that affected job retention and job satisfaction.
• Research question 4- More support from direct staff and admin was a factor companies could implement to have an impact on job satisfaction and job retention.

The variables that were identified as predictors of turnover for BTs are similar to what Boushey & Glynn (2012) reported for special education teachers, social workers, and residential staff. Supervisory dimensions which include lack of emotional support, lack of interest in or assistance with employees’ work, and infrequent constructive feedback are factors that are consistently related to turnover intentions of both special education teachers and social workers (Billingsley, 1993, 2004; Littrell & Billingley, 1994).

Training

Training is defined as initial training and ongoing training once Behavior Therapists are in the field. Training was a factor in all 4 research questions. Listed below are the findings from each research question.

• Research question 1- Training was the fourth highest factor reported that affected job retention and job satisfaction.

• Research question 2- “receiving adequate training” to complete the job is an intrinsic factor which affects job satisfaction and job retention.

• Research question 3- Again, “receiving adequate training” was reported as a job satisfaction factor that impacts job burnout for a Behavior Therapist.

• Research question 4- “A more robust training initially and ongoing” was identified as a factor companies could implement to have an impact on job satisfaction and job retention.
Employee attitudes towards training (Bartlett, 2001) and training effectiveness (Kontoghiorghes and Bryant, 2004) have been found to be positively related to organizational commitment (Igbaria and Greenhaus, 1992; Smeenk et al., 2006). Chandler and McEvoy (2000) and Dalziel (2010) noted that companies that invested in the training of their employees and engaged in regular performance appraisal were likely to benefit from lower employee turnover with lower turnover costs. Moreover, Dalziel (2010) suggested that staff retention is greatly enhanced if companies offer a learning environment and career paths that support staff in their personal development and recognize their learning attainments.

Benefits

Benefits is defined as employee benefits (medical, dental, vision), vacation and sick days, as well as incentives such as promotions, monetary incentives, and bonuses. Benefits was a factor found in research questions 1, 2 and 4. Listed below are the findings from each research question.

- Research question 1 - Benefits was the fifth highest factor reported that affected job retention and job satisfaction.
- Research question 2 - “receiving great benefits” is an extrinsic factor which affects job satisfaction and job retention.
- Research question 4 - “Benefits or better benefits” was a factor companies could implement to have an impact on job satisfaction and job retention.

Prior studies have shown that employee benefit practices, if not all practices, have a certain positive effect on retention (Mitchell 1982; Lincoln and Kalleberg 1996; Fairris 2004; Wagar and Rondeau 2006). It is particularly notable that when compared with
competitors in the same industry, the quality of health-related employee benefits and the rate of employee benefit expenses over the entire personnel cost (in other words, both the quantity and quality of employee benefits) negatively affected the resignation rate (Bennett, Blum, Long and Roman 1993).

**Life Balance**

Life Balance is defined as prioritizing work and a lifestyle as equal parts in one person’s life. Life balance was a factor found in research question 1,2 and 3. Listed below are the findings from each research question.

- **Research question 1** - Life balance was a factor reported as the 6th highest factor to affect job retention and job satisfaction.
- **Research question 2** - “Life and work balance” was an intrinsic factor, which affects job satisfaction and job retention.
- **Research question 3** - “I have great work and life balance” was reported as a job satisfaction factor that affects job burnout as a Behavior Therapist.

Work-life balance has implications for employee’s attitudes, behaviors and well-being, and also has an impact on organizational effectiveness (Eby et al. 2005). Hoobler et al. (2009) found that managers’ perception of employees’ work-life conflict influenced the bosses’ perceptions of employee fit and performance. According to Baral and Bhargava (2010), supervisor support in work-life issues is a reflection of an employee’s perception of whether the immediate supervisor is sensitive to their non-work activities. Employees who perceive their supervisors as supportive of their life-work balance are found to report higher levels of job satisfaction (Aryee et al. 2005).
**Job Responsibilities**

Job Responsibilities is defined as the general tasks, functions, and responsibilities of a BTs job. For example, taking accurate data, running the behavior plan accordingly, and conducting parent training when needed. Job responsibilities was found in research questions 1, 2 and 3. Listed below are the findings from each research question.

- Research question 1 - Job Responsibility was the seventh highest factor that affected job retention and job satisfaction.
- Research question 2 - “My job expectations are reasonable and obtainable” was reported as an extrinsic factor which affects job satisfaction and job retention.
- Research question 3 - Again, “my job expectations are reasonable and obtainable” was reported as a burnout factor that affects job burnout as a Behavior Therapist.

Chandler and McEvoy (2000) and Dalziel (2010) noted that companies that invested in the training of their employees and engaged in regular performance appraisal were likely to benefit from lower employee turnover with lower turnover costs. Moreover, Dalziel (2010) suggested that staff retention is greatly enhanced if companies offer a learning environment and career paths that support staff in their personal development and recognize their learning attainments. Overall, in comparing the results of this study to the very few studies that have been done on job retention and job satisfaction at the BT level, the final factors that were found were not surprising. In general, there is more work that can be done to make an impact on the employee experience at the BT level. It is apparent that ABA companies can make changes to systems and policies to have a greater impact on job retention and job satisfaction at the BT level.
Conclusions

The focus of this study was to discover factors that affected job satisfaction and job retention at the Behavior Therapist level in in-home ABA companies. In addition, this study was also to discover the correlation between job burnout and job satisfaction factors that increase or decrease job burnout at the Behavior Therapist level. A variety of factors were expressed by the 86 participants in the study, which resulted in factors relevant to job satisfaction and job retention. The following conclusions can be made regarding the findings in this study:

1. When companies do not offer a desired pay rate or pay raises, BT’s job satisfaction and job retention declines. As well as not receiving enough hours when BTs are available to work, higher pay and pay raises are an important factor to maintaining the job satisfaction and retention of BTs. Jurgensen (1978) found that pay satisfaction was the most important job attribute in a study of more than 10,000 employees. In commenting on pay-for-performance systems, Locke, Ferren, McCaleb, Shaw, and Denny (1980) noted, “No other incentive or motivational technique comes close to money” (p. 381). At a minimum, it is clear that pay is of fundamental importance to most employees, and it therefore stands to reason that organizations with employees who have positive affective reactions toward their pay will perform more effectively than those with employees with less positive reactions (Locke et al., 1980).

2. If ABA companies provide a consistent schedule and enough hours for a BT to maintain a desired and steady paycheck, job satisfaction and job retention will improve. Hours are not guaranteed at the BT level and it makes it difficult to
maintain a work life balance of paying bills and extra-curricular activities.

Consistency is a huge part of a child with autism ability to learn as well. The majority of the literature on work hour mismatches has focused on describing and predicting the static incidence and consequence of work hour mismatches (Sousa-Poza and Henneberger 2002; Jacobs and Gerson 2004; Reynolds and Aletraris 2007; Drago, Wooden and Black 2009). Lee B., Wang J., and Weststar J., (2015) discovered 2 major factors that affect pay and job retention and job satisfaction. The first is that employers’ attempts to accommodate employee preferences in work hours do positively impact particular employee attitudes and behaviors. The second is that the impact of achieving work hour congruence varies by employee subgroup and also by type of employee outcome, perhaps in even more idiosyncratic ways than we have been able to capture. Taken together, these findings support the growing body of literature examining individualized employment solutions and distinct management practices for individuals and subgroups (Tsui et al. 1997; Lepak and Snell 1999; Becker et al. 2009; Hornung, Rousseau, Glaser, Angerer and Weigel 2010; Mossholder et al. 2011).

3. When direct supervisors and admin staff provide support to BTs, their job satisfaction and job retention improves. Effective supervision practices that include the provision of emotional and professional support, guidance, and performance feedback can increase job satisfaction and job retention at the Behavior Therapist level. A study done by Gibson, Grey, and Hastings (2009) found that perceived supervisor support was found to be associated with a lower frequency of symptoms associated with burnout, including emotional exhaustion.
and depersonalization, as well as higher levels of personal accomplishment and perceived therapeutic self-efficacy. Finally, supervisor support appeared to serve as a protective factor against reduced feelings of personal accomplishment when ABA therapists were faced with high levels of perceived work-related demands. Lastly, lack of support and guidance from administration and managers is often cited as a big contributor to the attrition problem (Billingsley, 1993; Brownell & Smith, 1992). With this last factor, peer collaboration programs are not only potentially useful as the means of overcoming collegial isolation (Billingsley, Bodkins, & Hendricks, 1993), they are also a way for peer employees to provide the support and assistance they may lack from their administrators or supervisors.

4. If ABA companies invest in training the BTs and informing them of their job responsibilities in the initial training and ongoing training, it will have a great impact on job retention and job satisfaction. The Registered Behavior Technician training is changing how Behavior Therapists are trained to work with children with autism. As of 2014, the Behavior Analysis Certification Board (BACB) created this training for ABA companies to train BTs in a manner which supports them and gives them the information before they start working with children on the spectrum (www.BACB.com) This form of training is not mandatory for companies to implement, but it is an acknowledgment of further support and training that is needed at the BT level. Employee attitudes towards training (Bartlett, 2001) and training effectiveness (Kontoghiorghes and Bryant, 2004) have been found to be positively related to organizational commitment (Igbaria and Greenhaus, 1992; Smeenk et al., 2006). Chandler and McEvoy (2000) and
Dalziel (2010) noted that companies that invested in the training of their employees and engaged in regular performance appraisal were likely to benefit from lower employee turnover with lower turnover costs. Moreover, Dalziel (2010) suggested that staff retention is greatly enhanced if companies offer a learning environment and career paths that support staff in their personal development and recognize their learning attainments.

5. If ABA companies offered benefits such as medical, dental, vacation time and sick time, job satisfaction and job retention would improve. All BTs that participated in the survey work for a company that offers benefits after a BT works 30 hours a week consistently. If a BT works for Ed Support Services for example, a BT needs to work 30 hours a week for 6 weeks straight before they can receive benefits. Prior studies have shown that employee benefit practices, if not all practices, have a certain positive effect on retention (Mitchell 1982; Lincoln and Kalleberg 1996; Fairris 2004; Wagar and Rondeau 2006). It is particularly notable that when compared with competitors in the same industry, the quality of health-related employee benefits and the rate of employee benefit expenses over the entire personnel cost, in other words, both the quantity and quality of employee benefits, negatively affected the resignation rate (Bennett, Blum, Long and Roman 1993).

6. If ABA companies focus more on supporting BTs in a life/work balance, it will have a positive effect on job retention and job satisfaction with Behavior Therapists. The positive psychology movement has helped to promote the importance of personal growth as worthy of theoretical and empirical
consideration (Seligman & Csikszentmihalyi, 2000). Joseph and Linley (2005) describe the concept of personal growth as positive changes related to the ways that people view themselves, their life philosophy, and the value that they place on relationships with other people. People who are becoming more knowledgeable and adept at their positions are more valuable than employees who remain stagnant. Encouraging employees to pursue personal goals has a positive effect on the company. When employees are pushing themselves to learn more and improve themselves personally, they contribute more to the company and are happier employees.

7. If an ABA company concentrates on employees’ personal growth and promoting employees within, that will have an impact on job retention and job satisfaction. A BT needs to feel a part of the company and valued as a great employee in order to stay employed with a company. Companies should have a protocol of how to promote employees within the company, and inform BTs of the protocol. Giving them this information will give them a goal and a process of how to achieve that goal within the company.

ABA companies can benefit by listening to the job satisfaction concerns of BTs and making changes that have a direct impact on job retention at the BT level within the company. Making these changes will address the huge revolving door retention problem. The industry has changed a great deal over the years and it is time to truly address this issue to have a greater impact on the autism community.
Implications for Action

Based on the results of this study, it is apparent that ABA companies can implement several protocols, policies and new systems to have a greater impact on job satisfaction and job retention for Behavior Therapists. All seven factors pertaining to job satisfaction and job retention that were reported were shown as greatly significant to the experience of Behavior Therapists in ABA companies. Commitment to the implementation of changes centered around the seven factors identified in this study can have a great impact on the financial stability and overall growth of the ABA company, which would have a greater impact on the families and children served. Addressing these factors would have a great impact on ABA companies overall.

The following are recommendations for action:

1. Re-negotiating reimbursement rates the companies receive from insurance companies would is a crucial negotiating factor ABA companies need to address. Each ABA company is given a certain rate for each service provided. For example, a rate for a BT to provide 1:1 direct services to a client would cost the insurance company $60. The rate for a BCBA to provide supervision in the home setting for that BT would be $100. Some ABA companies have had the same rates for years and do not realize that their rates are negotiable. These rates have a direct result on how much employees are paid. Consistent pay raises with annual or bi-annual reviews would also be crucial to implement in ABA companies.

2. Giving BTs a desired schedule and enough hours for work in order to maintain a steady paycheck is important to improving their quality of life and supporting
them to remain in their job. One way to address this is to pay a BT an hourly rate for the hours canceled by the family until the ABA company can give the BT the desired hours again. Paying the BTs during a period of low work hours is more cost effective than onboarding a new employee.

3. Direct supervisors and admin staff provide BTs with a primary clinical supervisor who can provide consistent support in their employment. One of the ways employees feel valued and part of the company was through the support they receive from their direct supervisors. Because each BT maybe have several direct supervisors due to having several different clinical teams, one clinician should be the main supervisor for each BT. Having one supervisor to go to for all questions and concerns would ensure a more supportive work environment for each BT.

4. ABA companies implement initial training programs as well as ongoing training programs for Behavior Therapists to have a greater impact on job satisfaction and job retention. Giving the BTs the information they need in order to complete their job to their fullest potential has a direct impact on a client’s progress and ability to learn. This training and information will assist BTs in better understanding their roles.

5. ABA companies recognizing the impact and value of providing benefits to employees such as medical, dental, vacation and sick time. Providing benefits will have a direct impact on the work/life balance BTs indicated as necessary for their retention with the company. Having the ability to take time off to take care of personal needs and having health insurance coverage is crucial to the life
balance of a Behavior Therapist. This will have a direct impact on job retention and job satisfaction of a BT.

6. BTs in this study expressed their dedication and commitment to doing the critically important work of providing on-going intensive therapy with the parents and children with autism. On the other hand, BTs do not believe that the ABA companies recognize the vital role the BT plays in the ultimate success and profitability of the company. It is vital to the survival of the ABA company that they shift from considering the ABA therapists as a commodity that can be replaced, to viewing ABA therapists as vital assets and worthy of continued support and development.

**Recommendations for Further Research**

The following are recommendations for future research for job satisfaction and job retention for a Behavior Therapist.

**Recommendation 1**

A replication of this study is both appropriate and encouraged. Since job retention and job satisfaction with the BT population is rarely studied, conduct research to replicate this study after a number of years to compare results using the same methodology.

**Recommendation 2**

ABA companies are represented in many states throughout the country. A future study could compare the results of this study to another group of Behavior Therapists outside of California or outside of the Bay Area, to investigate if job satisfaction and job retention factors are different in diverse locations throughout the nation.
Recommendation 3

A qualitative study to investigate and understand in more depth the factors identified as important to the job satisfaction and job retention of BTs as a future study. The quantitative data yielded a significant amount of information but by adding qualitative research one may be able to investigate specific reasons as to how certain factors affect job satisfaction and job retention. Qualitative research would bring the voice of the Behavior Therapist to the research.

Recommendation 4

Conduct a case study at a company with 50 or less Behavior Therapists to explore the impact of job retention and job satisfaction factors in a small company.

Recommendation 5

Conduct a study about the supports and barriers of companies that have implemented one or more of the factors identified in this study and the impact they have had on job retention and job satisfaction.

Recommendation 6

Looking at the business model of the company and looking at what changes can be made for the company to have more of a client-focus approach.

Recommendation 7

Conduct a study on surveying Behavior Therapists to see what attached them to that ABA industry and what has kept them employed in the company.

Concluding Remarks and Reflections

There are several factors that companies can implement to help affect job retention and job satisfaction. Better pay and benefits, more training and supervisor
support are factors ABA companies can take a closer look at and change for the better. BTs that have a great understanding of their job responsibilities and can manage a great life/work balance is also important. The impact that would have on Behavior Therapists is significant and powerful in the world of autism.

The results of this research reflect the researcher’s own personal experience with the Behavior Therapist experience, both as a Behavior Therapist and as Director of Recruiting. Currently, the researcher is in her twentieth year working in the field of autism and the researcher has seen firsthand what factors affect job retention and job satisfaction at the BT level. The researcher had the unique opportunity to build training programs, have an influence over pay, the number of hours a BT receives, and directly supervise BTs in the home setting. As the Director of Recruiting for an in-home ABA company, the researcher was offered amazing opportunities of personal reflection and growth. The importance of supporting Behavior Therapists, paying and training them well, and giving them a voice have all significantly impacted the researcher as a principal and fueled a desire to explore the topic of job satisfaction and job retention in more depth.

The power of job satisfaction and job retention at the Behavior Therapist level can have such an impact on the children and adults with autism. Behavior Therapists who are leading change initiatives, trying to improve schools, or are passionate about making a difference in the lives of their students, will recognize their inability to do any of these things without the commitment and dedication of teachers.

With this chapter, the candidate has become the expert. It stands alone as the final product of the study.
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APPENDICES
APPENDIX A

Synthesis Matrix

<table>
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<th>Citation</th>
<th>Autism</th>
<th>ABA</th>
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<th>Parents</th>
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<td>Federal Register, May 6, 1991, p. 21226</td>
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<td>Leech, M.</td>
<td>Number of autistic children in Alabama’s public schools growing rapidly; teachers lack training to deal with autism.</td>
<td>The Birmingham News.</td>
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<td>Scheuermann, B., Webber, J., Boulot, A., &amp; Goodwin, M.</td>
<td>Problems with personnel preparation in autism spectrum disorder.</td>
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<td>Attrition/Retention of Urban Special Education Teachers: Multi-Faceted Research and Strategic Action Planning. Final Performance Report, Volume 1.[Chapter Three and Chapter Four].</td>
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<td>Author(s)</td>
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<td>Stempien, L. R., &amp; Loeb, R. C.</td>
<td>2002</td>
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<td>Russell, E., Williams, S. W., &amp; Gleason-Gomez, C.</td>
<td>2010</td>
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<td>Greenberg, J. S., Almeida, D. M., &amp; Bishop, S. L.</td>
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<td>Greenberg, J. S., Almeida, D. M., &amp; Bishop, S. L.</td>
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<td>Snow, E., Langdon, P. E., &amp; Reynolds, S.</td>
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<td>(2007). Care staff attributions toward self-injurious behavior exhibited by adults with intellectual disabilities.</td>
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<td>(2007). Care staff attributions toward self-injurious behavior exhibited by adults with intellectual disabilities.</td>
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APPENDIX B

Letter to HR Department

January 20, 2016
Dear HR Department,

My name is Mel Dauster and I currently a doctoral student at Brandman University in Irvine, CA. I am working towards my doctorate degree in Education with an emphasis in Organizational Leadership. I have been working in the field of autism for almost 20 years and I have a huge passion to support in home companies in their growth with an emphasis on employee retention and employee satisfaction.

The purpose of my quantitative study is to discover the factors that influence job satisfaction and job retention at the Behavior Therapist level. The target population is Behavior Therapists working in companies who employ 50+ BTs and who have been with the company for over 3 months. Using a survey that consists of three sections, I will be addressing the following research questions:

1. What factors do behavior therapists working with students with autism identify as important regarding job satisfaction and job retention?
2. What supports and barriers do behavior therapists working with students with autism experience that affects their job satisfaction and job retention?
3. What improvements to the work place do behavior therapists working with students with autism identify as necessary to improve job satisfaction and job retention.

I am asking for your company’s support in providing the survey link to BTs and encouraging their participation in the study. The survey will take approximately 5-10 minutes to complete. The first section of the survey addresses factors that influence their experience with job satisfaction and job retention on a rating scale. The second section addresses supports and barriers on a rating scale and the third section is open-ended questions to address improvements or factors that are working that influences job satisfaction and job retention.

Each company will remain anonymous in the data reporting process. No names or email addresses will be collected from the participant. Each survey will be coded with a letter representing each company. For example, Ed Support Services will be survey A. If you do agree to participate in the study, I am more than happy to give you a report of the data received from the BTs that participated in your company. This will give you a greater understanding of the BTs experience in your company. The data reported in my dissertation will be a collective of all the companies combined.

The survey will be released on Feb 11th, 2016 and each participant will have 2 weeks to complete the survey. Please let me know if you have any questions or concerns before consenting to this study. Thank you so much for your time and I truly appreciate your support in my study.

Melissa M. Dauster
Melissa M. Dauster
Doctoral Candidate Ed.D.
6331 Sunnymere Ave
Oakland, California 94605
415-810-3640 mobile
mdauster@mail.brandman.edu
## Survey Cross Referenced

### Research Questions and Survey Items

<table>
<thead>
<tr>
<th>Research Questions and Survey Items</th>
<th>Elements Identified From the Synthesis Matrix</th>
</tr>
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<tbody>
<tr>
<td>1) What factors do behavior therapists working with students with autism identify as important regarding job satisfaction and job retention?</td>
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<tr>
<td><strong>Job Satisfaction</strong></td>
<td></td>
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<tr>
<td>A 5. The amount of respect and fair treatment you receive from your superiors.</td>
<td>DeConinck, J.B. (2010).</td>
</tr>
<tr>
<td><strong>Job Retention</strong></td>
<td></td>
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<tr>
<td>B 2. I feel used up at the end of the workday.</td>
<td>Seery, B. M., (1990)</td>
</tr>
<tr>
<td>B 3. I feel fatigued when I get up in the morning to</td>
<td>Platt, J.M., &amp; Olson, J. (1990)</td>
</tr>
<tr>
<td>Statement</td>
<td>Reference</td>
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<tr>
<td>face another day on the job.</td>
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<tr>
<td>B 4. I can easily understand how my clients feel about things</td>
<td>Dick, V.R., Wagner, U., (2001)</td>
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<tr>
<td>B 6. Working with people all day is really a strain on me.</td>
<td>Leung D.Y.P., Lee W.W.S.,(2006)</td>
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<tr>
<td>B 19.</td>
<td>I have accomplished many worthwhile things in this job.</td>
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<td>B 20.</td>
<td>I feel like I am at the end of my rope.</td>
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<tr>
<td>B 21.</td>
<td>In my work, I deal with emotional problems very calmly.</td>
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<td>B 22.</td>
<td>I feel clients blame me for some of their problems.</td>
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<td>2) What supports and barriers do behavior therapists working with students with autism experience that affects their job satisfaction and job retention?</td>
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<td>1.</td>
<td>Travel time during work</td>
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<td>Langeliers (2013)</td>
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<tr>
<td>2.</td>
<td>Communication between employees and supervisors</td>
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<td>3.</td>
<td>Overall culture of the company.</td>
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<td>4.</td>
<td>Opportunities to use skills/abilities</td>
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<td>5.</td>
<td>The work itself</td>
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<td>6.</td>
<td>Management recognition of job performance</td>
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<td>7.</td>
<td>Career advancement opportunities</td>
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<td>8.</td>
<td>Job-specific training</td>
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<td>9.</td>
<td>Networking</td>
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<td>10.</td>
<td>Relationship with immediate supervisor</td>
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</table>
11. Please list any additional supports or barriers that affect your job satisfaction or continuing employment as an ABA therapist | Open ended, other than literature

3) What improvements to the workplace do behavior therapists working with students with autism identify as necessary to improve job satisfaction and job retention?

1. What improvements can the company you work for implement to improve your satisfaction with your job?

2. What improvements can the company you work for implement to improve your experience to stay with the company?

\[ \text{c}^* \] (A) is Mohrman-Cooke-Mohrman Job Satisfaction Scale Survey (B) The Maslach Burnout Inventory
APPENDIX D

Informed Consent Form

INFORMATION ABOUT: A quantitative study to explore job retention and job satisfaction factors that affect Behavior Therapists that work in in-home ABA companies. BRANDMAN UNIVERSITY 16355 LAGUNA CANYON ROAD IRVINE, CA 92618

RESPONSIBLE INVESTIGATOR: Melissa M. Dauster

PURPOSE OF STUDY: The purpose of this study is to identify the factors influencing job satisfaction and job retention as perceived by behavior therapists working with children diagnosed with autism. A further purpose of the study is to describe the improvements in the work environment that behavior therapists working with students with autism identified as necessary to increase their job satisfaction and job retention. Through the combined efforts of the peer researchers in this study, the outcomes may yield new and exciting information that can be duplicated by future researchers and ultimately generalized to the larger population.

This study will fill in the gap in the research regarding job retention and job satisfaction factors at the Behavior Therapist level. While there is a substantial amount of literature regarding job retention and job satisfaction in many populations, there is a gap in the literature about the factors that effect employees who work with children diagnosed with autism in the home setting. A very significant gap in the literature exists about the factors that effect job satisfaction and job retention with the employees who work directly with the children diagnosed with autism in the home setting.

By participating in this study I agree to participate in an online survey. The survey will take approximately ten minutes and I will have 1 week to complete the survey.

I understand that: (Please mark an X next to each one)

________ a) There are minimal risks associated with participating in this research. I understand that the Investigator will protect my confidentiality by keeping the identifying codes and research materials in a locked safe that is available only to the researcher.

________ b) The possible benefit of this study to me is that my input may help add to the research regarding factors that effect job retention and job satisfaction. The findings of this survey will be reported in a study and will be available to the
public upon completion. I understand that I will not be compensated for my participation.

_______ c) Any questions I have concerning my participation in this study will be answered by Melissa M. Dauster. She can be reached by e-mail at mdauster@mail.brandman.edu or by phone at 415-810-3640

_______ d) My participation in this research study is voluntary. I may decide to not participate in the study and I can withdraw at any time. I can also decide not to answer particular questions during the interview if I so choose. I understand that I may refuse to participate or may withdraw from this study at any time without any negative consequences. Also, the Investigator may stop the study at any time.

_______ e) No information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so informed and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

_______ f) I acknowledge that I have received a copy of this form and the “Research Participant’s Bill of Rights.” I have read the above and understand it and hereby consent to the procedure(s) set forth.

Confirm

Demographics

Please answer the questions below:

1. How old are you?
   
0= 18-25
1= 26-32
2= 33-40
3= 41-47
4= 48-55
5= 55+
2. What is your gender?
   0 = Male
   1 = Female

3. What is your ethnicity?
   0 = White
   1 = Black or African American
   2 = American Indian or Alaska Native
   3 = Asian
   4 = Native Hawaiian or other Pacific Islander
   5 = Two or more races

4. How many months have you been a Behavior Therapist?
   • 0 = less than 3
   1 = 3-6
   2 = 6-9
   3 = 9-12
   4 = 12+

MASLACH BURNOUT INVENTORY – Educators Survey

Respondents indicate how often the following items occur: never, sporadic (a few times a year or less), now and then (once a month or less), regular (a few times a month), often (once a week), very often (a few times a week), and daily.

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<th>Educators Survey</th>
<th>How Often:</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td></td>
<td>Never</td>
<td>A few times a year</td>
<td>Once a month</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every Day</td>
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1. I feel emotionally drained from my work.
2. I feel used up at the end of the workday.
3. I feel fatigued when I get up in the morning and have to face another day.
4. I can easily understand how my clients feel about things.
5. I feel I treat some clients as if they were impersonal objects.
6. Working with people all day is really a strain on me.
7. I deal very effectively with the problems of my clients.
8. I feel burnout from work.
9. I feel I’m positively influencing other people’s lives through my work.
10. I feel like I have become more callous toward people since I took this job.
11. I worry that this job is hardening me emotionally.
12. I feel very energetic.
13. I feel frustrated by my job.
14. I feel I’m worrying too much about by job.
15. I don’t really care what happens to some clients.
16. Working with people directly puts too much stress on me.
17. I can easily create a relaxed atmosphere with my clients.
18. I feel exhilarated after working closely with my clients.
19. I have accomplished many worthwhile things in this job.
20. I feel like I am at the end of my rope.
21. In my work, I deal with emotional problems very calmly.
22. I feel clients blame me for some of their problems.

Job Satisfaction Scales
For the following, consider each statement based on your perception of the item in your school. Please respond by circling the correct number related to your scaled response. The numbers 1 disagree and the numbers 5 agree. Please mark your responses on the answer sheet provided.

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<td>Disagree</td>
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<td>Neutral</td>
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<td>Sometimes</td>
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<tr>
<td>Agree</td>
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<tr>
<td>Disagree</td>
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<tr>
<td>Agree</td>
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Intrinsic Motivation
1. I feel self-esteem or self-respect from being at my job.
2. I have the opportunity for personal growth in my job.
3. I feel worthwhile and accomplished in my job.
4. My current work meets the expectations set forth when I first began my job.
5. I have the opportunity to be creative at my job.
6. Supervisor’s make me feel supported and valued.
7. I feel I have all the tools I need to complete my job.
8. I have great communication with my clinical team.
9. I have the opportunity to career advancement in the company I work for.
10. I have a great work and life balance.
11. I have received adequate training to complete my job.
12. I have a great relationship with my clinical team.

**Extrinsic Motivation**
13. I feel that I am respected and treated fairly by my superiors.
15. I received the right amount of supervision.
16. I have the opportunity to participate in the determination of methods, procedures and goals for the client’s programs.
17. The distance that I travel on a daily basis is reasonable
18. I have a great relationship with my clinical team.
19. The company’s culture has an influence on my job performance.
20. I feel I am compensated well for the job I am doing.
21. Admin personnel are available and supportive when I need them.
22. I receive great benefits (medical, dental, etc.) from my job.
23. My job expectations are reasonable and obtainable.
24. I work enough hours to meet my needs.

Listed below are open ended questions where you can provide more details of your experience in the home setting.
1. Please list any additional factors that affect your job satisfaction or continued employment as an ABA therapist.
   1. 
   2. 
   3. 
2. What top 3 improvements can the company you work for, implement to improve your satisfaction with your job?
   1. 
   2. 
   3. 
3. What could the company you work for implement to increase the retention of Behavior Therapists?
   1. 
   2. 
   3.
APPENDIX E

Informed Consent

INFORMED CONSENT FORM

INFORMATION ABOUT: A quantitative study to explore job retention and job satisfaction factors that affect Behavior Therapists that work in in-home ABA companies.

BRANDMAN UNIVERSITY
16355 LAGUNA CANYON ROAD
IRVINE, CA 92618

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I understand that:

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_______ b) The possible benefit of this study to me is that my input may help add to the research regarding factors that effect job retention and job satisfaction. The findings of this survey will be reported in a study and will be available to the public upon completion. I understand that I will not be compensated for my participation.
INFORMED CONSENT FORM

c) Any questions I have concerning my participation in this study will be answered by Melissa M. Dauster. She can be reached by e-mail at mdauster@mail.brandman.edu or by phone at 415-810-3640

d) My participation in this research study is voluntary. I may decide to not participate in the study and I can withdraw at any time. I can also decide not to answer particular questions during the interview if I so choose. I understand that I may refuse to participate or may withdraw from this study at any time without any negative consequences. Also, the Investigator may stop the study at any time.

e) No information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so informed and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

f) I acknowledge that I have received a copy of this form and the “Research Participant’s Bill of Rights.” I have read the above and understand it and hereby consent to the procedure(s) set forth.

_________________________________________  ________________________________
Participant Name                  Date Signed
APPENDIX F

Survey Invitation Letter

<Date>, 2016

Dear Behavior Therapist:

My name is Mel Dauster and I am a doctorate student at Brandman University located in Irvine, CA. I started out in the ABA field 18 years ago as a Behavior Therapist and a great passion of mine is improving the experience and satisfaction of employees at the Behavior Therapist level. I am conducting a study on job retention and job satisfaction with Behavior Therapists that work in in-home ABA companies. You were chosen to participate in this study because you were identified as a Behavior Therapist who would have some great input in this study. Over 1,000 Behavior Therapists have been invited to take this survey to provide information on the factors that affect your experience working with your company in the home setting.

The survey will take approximately 10 minutes. It will cover a list of topics in regards to job satisfaction and job retention. Any information that is gathered during our survey will remain strictly confidential. Your name, email, and which company you work for will not be collected, and no individual information will be shared with your company. In an effort to make this survey as comfortable as possible for you, please feel free if you are uncomfortable with a question to leave it unanswered and pass to the next question. You can end the survey at any time.

You can access the survey by clicking on the following link:

www.surveymonkey.com

If you have any questions about this study or would like any additional information about participation within the study, please feel free to contact me using the information below.

Respectfully,

Melissa Dauster
Doctoral Candidate Ed.D.
6331 Sunnymere Ave.
Oakland, CA 94605
415-810-3640 mobile
mdauster@mail.brandman.edu
BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

Research Participant’s Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.

2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.

3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.

4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.

5. To be told what other choices he/she has and how they may be better or worse than being in the study.

6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.

7. To be told what sort of medical treatment is available if any complications arise.

8. To refuse to participate at all before or after the study is started without any adverse effects.

9. To receive a copy of the signed and dated consent form.

10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92613.