A Survey of Registered Behavior Technicians: Initial and Ongoing Training and Support

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A SURVEY OF REGISTERED BEHAVIOR TECHNICIANS: INITIAL AND ONGOING

TRAINING AND SUPPORT

by

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Graduate Certification, Autism Spectrum Disorders
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ABSTRACT

SURVEY OF REGISTERED BEHAVIOR TECHNICIANS: INITIAL AND ONGOING TRAINING AND SUPPORT

Gabriela McWhorter. Zapatero
Old Dominion University, 2021
Chair: Dr. Robert A. Gable

Children diagnosed with autism spectrum disorder (ASD) benefit from early intervention, specifically applied behavior analysis (ABA). ABA is often implemented by paraprofessionals who are known as registered behavior technicians (RBTs). For many years, educators have known the value of corrective feedback in relation to skill acquisition. In this case, emphasis was placed on the proclivities of the staff in regard to feedback. This mixed methodology study examined the various strategies currently utilized to instruct RBTs, as well as their preferences for initial and continued training. Results indicated the majority of RBTs who responded to the online survey were being trained through direct, in-person feedback method of modeling and prefer direct, in-person feedback as their continued form of training. Drawing on present results, implications for future research are offered to enhance the development of the field.
Copyright, 2021, by Gabriela McWhorter Zapatero, All Rights Reserved.
This dissertation is dedicated to my mother, Mariella, and my “Grandma Evy.” These two women exude so many characteristics I strive to emulate in both my personal and professional life. Their love for learning and wanderlust throughout life has taught me the importance of appreciating the opportunities presented to me while also being sure to venture out and have new experiences and to push boundaries. Growing up with strong female figures shaped me into the person that I have become. When you have titans in your corner, no obstacle seems impassible.
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## ACRONYMS

<table>
<thead>
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<th>ABA</th>
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</tr>
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<tbody>
<tr>
<td>ASD</td>
<td>Autism Spectrum Disorder</td>
</tr>
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<td>BACB</td>
<td>Behavior Analyst Certification Board</td>
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<td>BCBA</td>
<td>Board Certified Behavior Analyst</td>
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<td>Behavioral Skills Training</td>
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<td>Delayed</td>
</tr>
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<td>EBP</td>
<td>Evidence-Based Practice</td>
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<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>RBT</td>
<td>Registered Behavior Technician</td>
</tr>
<tr>
<td>WWCH</td>
<td>What Works Clearinghouse</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

## CHAPTER ONE

INTRODUCTION ........................................................................................................ 1

Prevalence Autism Spectrum Disorder ................................................................. 1

  ASD Terminology ................................................................................................. 2

  ASD Indicators ...................................................................................................... 3

  Early Intervention ................................................................................................. 4

  Evidence-Based Practices ..................................................................................... 5

Applied Behavior Analysis ..................................................................................... 7

Applied Behavior Analysis Sessions ..................................................................... 9

Applied Behavior Analysis Effectiveness ............................................................. Error! Bookmark not defined.

Registered Behavior Technician Role ................................................................ 9

  Registered Behavior Technician Training .......................................................... 10

  Registered Behavior Technician Qualifications ................................................. 10

  Registered Behavior Technician Barriers ........................................................... 10

  Registered Behavior Technician Certification Limitations .............................. 11

Rationale for this Study ......................................................................................... 12

Summary .................................................................................................................. 14

## CHAPTER TWO

REVIEW OF THE LITERATURE.............................................................................. 15

Method of Literature Search .................................................................................. 15

Search Procedures .................................................................................................. 16

  Inclusion and Exclusion Criteria ........................................................................ 16

Final Articles Included in Literature Review ....................................................... 17

  Definitions of Codes ............................................................................................ 17

Feedback.................................................................................................................. 17

Training.................................................................................................................... 18

Intervention Analysis............................................................................................. 18

  Data Extraction .................................................................................................... 19

Procedural Fidelity .................................................................................................. 19

Comparative Results .............................................................................................. 20

Brief Article Overview........................................................................................... 21

Types of Feedback.................................................................................................. 22
CHAPTER FIVE

DISCUSSION

Implications for Future Research

Limitations
References .................................................................................................................................................. 57

Appendix A ................................................................................................................................................ 78
  Survey Recruitment Announcement ......................................................................................................... 78

Appendix B ................................................................................................................................................ 79
  Survey Introduction Letter ......................................................................................................................... 79

Appendix C ................................................................................................................................................ 80
  RBT Survey Questions .............................................................................................................................. 80

Appendix D ................................................................................................................................................ 83
  BACB Sanctioned RBT Task List ............................................................................................................... 83
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>17</td>
</tr>
<tr>
<td>2.2</td>
<td>22</td>
</tr>
<tr>
<td>3.1</td>
<td>40</td>
</tr>
<tr>
<td>3.2</td>
<td>41</td>
</tr>
</tbody>
</table>

2.1 Overview of Coded Literature Review Articles  
2.2 In-depth Review of Literature Components  
3.1 Blueprint for Survey  
3.2 Blueprint for Data Analysis
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Flow Chart of Article Selection</td>
<td>16</td>
</tr>
<tr>
<td>3.1</td>
<td>RBT Survey Response to “How Heard About ABA”</td>
<td>39</td>
</tr>
<tr>
<td>4.1</td>
<td>RBT Survey Response to “How Satisfied are You Currently”</td>
<td>46</td>
</tr>
<tr>
<td>4.2</td>
<td>RBT Survey Response to “Majority of Initial Training”</td>
<td>47</td>
</tr>
<tr>
<td>4.3</td>
<td>RBT Survey Response to “Initial Training Methods”</td>
<td>47</td>
</tr>
<tr>
<td>4.4</td>
<td>RBT Survey Response to “Majority of Continued Training”</td>
<td>47</td>
</tr>
<tr>
<td>4.5</td>
<td>RBT Survey Response to “Continued Training Methods”</td>
<td>47</td>
</tr>
<tr>
<td>4.6</td>
<td>RBT Survey Response to “Preferred More Exposure – Initial Training”</td>
<td>48</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

Chapter one presents the reader with background information regarding autism spectrum disorder (ASD) and the increasing prevalence of the diagnosis. With the increased number of children receiving an ASD diagnosis, the need for therapies to target skill deficits and maladaptive behaviors increases as well. A common therapy for children with ASD is applied behavior analysis (ABA). Chapter one explains ABA, as well as presents an in depth understanding of the paraprofessionals that lead the therapy sessions.

For the majority of children, emotional and intellectual development follows a predictable sequence and set of milestones. When conditions are optimal, key milestones are easily achieved, and continual development throughout childhood and beyond is considered within the parameters of normalcy (Centers for Disease Control and Prevention [CDC], 2020a). However, in some cases, those conditions are altered by a variety of circumstances, including problems during pregnancy or childbirth, illnesses, genetic predispositions, severe poverty, and malnutrition. When circumstances vary, either genetically or environmentally, they can negatively affect the achievement of typical milestones that determine a child’s ability to function according to societal standards (CDC, 2020a). In these cases, early intervention becomes critical to a child’s continued development. There is a plethora of research that supports the importance of identifying deficits and treating them as early as possible to be able to increase the probability of a child becoming a productive and functional member of society (Autism Speaks, 2021). This could not be more applicable than when providing services to young children diagnosed with ASD.

Prevalence Autism Spectrum Disorder
The Centers for Disease Control and Prevention (CDC, 2020b) estimates that close to 15% of children between the ages of three and 17 have at least one developmental disability. This figure equates to about one in every six children in the United States receiving a developmental disability diagnosis (CDC, 2020b). A developmental disability should be considered whenever a child’s physical, cognitive, or social-emotional development begins to lag markedly behind his or her peers, or if the child suddenly loses a previously mastered skill (American Academy of Pediatrics, 2019). As reported by the National Autism Center at May Institute (2020), the most prevalent developmental disabilities are intellectual disability, cerebral palsy, and ASD. According to the National Autism Association (2020), ASD is both the fastest growing developmental disability and, when it comes to intervention and other treatments, the most underfunded.

**ASD Terminology**

The specific terminology and diagnostic criteria regarding ASD has continued to evolve over the last 80 years. For example, in 1943, ASD was considered a distinctive characteristic of children who were “feebleminded” and in 1952 it was believed to be a psychiatric condition (Kanner, 1943). The term autism was first recognized as a diagnosable disorder in the 1960s, when it appeared in the second edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-II; American Psychiatric Association [APA], 1968) under the umbrella of schizophrenia-childhood type. Over time, the terms autistic/autism, and the diagnostic criteria describing the characteristics of this disorder, were modified with each new revision of the DSM. Specifically, autistic disorder was listed as a subtype of a larger neurodevelopmental spectrum called Pervasive Developmental Disorders in the DSM-III (APA, 1980), followed by the categorization of autism as a “spectrum” disorder in the DSM-IV (APA, 1994). Finally, with the
publication of the DSM-V (APA, 2013), autism spectrum disorder became a standalone
diagnostic category, complete with details regarding specific criteria, specifiers, and severity
level. In 2018, the CDC reported that one in 54 children in the United States has been identified
with ASD (Maenner, 2020); a 47% increase from one in every 88 children in 2012 (Autism
Science Foundation, 2020). Despite the substantial amount of time spent studying ASD, it is still
unknown why the incidence of ASD diagnosis has increased, and continues to increase, so
rapidly. Changes in diagnostic criteria/accuracy, environmental components such as perinatal
care, changes in research methodologies, and cultural factors often are cited as key explanations
or rationalizations for this rise (Negger, 2014).

**ASD Indicators**

While the designations and specific diagnostic criteria have shifted and evolved over the
years, the key indicators that aid in identifying the possibility of an ASD diagnosis have not. A
child diagnosed with ASD often manifests symptoms in three specific areas of development
known as the triad of impairments. These are (a) social interactions, (b) communication skills,
and (c) repetitive behaviors/restricted interests (Autism Treatment Center of America, 2017).

Even when ASD was first formally identified in 1943 by Dr. Leo Kanner, the symptoms reported
were similar to those used today for diagnosis. The symptoms included limited: social and
communication skills development, often with ritualized behaviors and possibly high intelligence
or memory (National Autism Association, 2020; Zeldovich, 2018). Per the DSM-V (APA, 2013),
the formal definition of ASD is based on a five-part diagnosis:

(a) persistent deficits in social communication and social interactions across multiple
contexts, b) restricted, repetitive patterns of behaviors, interest, or activities, (c)
symptoms must be present in the early developmental period, (d) symptoms cause
clinically significant impairment in social, occupational, or other important areas of current functioning, (e) these disturbances are not better explained by intellectual disability or global developmental delay (APA, 2013, pp. 50-51).

A regression in communication skills is one of the main red flags that indicate the need for professional guidance towards a possible diagnosis of ASD (APA, 2013). An example of regression in communication can be demonstrated by a child who begins to babble and uses short phrases within the first two years of life, then no longer demonstrates the ability to say previously mastered words.

As stated before, there has been a steady increase in the rate of ASD diagnoses over the past 20 years. In 2016, one in 54 children was identified with ASD, which more than doubled the rate from 2004 (CDC, 2020b, Maenner, 2020). This significant increase in just a decade clearly indicates the dramatic increase in prevalence of the disability. With diagnostic rates accelerating so rapidly, the necessity to deliver evidence-based, quality early intervention services becomes even more urgent.

**Early Intervention**

Experts in childhood development concur that most children grow and mature in typical and fairly predictable stages and that the first five years of a child’s life are especially crucial for brain, body, and social-emotional development (California Department of Education, 2019). These early years are even more critical for children with ASD who, without proper diagnosis and successful intervention, may slowly and continuously fall further behind their peers. Therefore, early intervention is absolutely critical to support those early years of growth and maturation, ensuring the child does not fall too far behind his or her peers. Early intervention often includes speech and language therapy, occupational therapy, and physical therapy, though
there are many other services that target cognitive, adaptive, sensory processing, or socio-emotional skills that can be incorporated based on the unique needs of the child (Center for Parents Information and Resources, 2017). Interventions that occur early in a child’s development are crucial not only because they prevent the child from falling further behind his or her peers, but also because the neural circuits, or the connections within the brain that carry out specific functions when fired, are at their most receptive to new information during the first three years of life (CDC, 2020a). This ability to rewire and relearn in younger brains is known as neuroplasticity. It is widely accepted that over time, the brain’s neural circuits become less adaptable and are therefore harder to change (Novak, 2019). For children who demonstrate delays, various early interventions are recommended to expand their ability to engage with various people, in varied environments, manage stress, and realign their life’s trajectory towards success (Johnson, 2017).

**Evidence-Based Practices**

It is important to note that not all services delivered to a young child are effective at narrowing developmental gaps. Any and all early intervention strategies should be documented as evidence-based. Implementing strategies with high fidelity and utilizing evidence-based practices (EBPs) that reflect research-supported early interventions will increase the probability of achieving positive outcomes. EBPs are considered the preferred option when creating treatment plans because data collected in similar situations has already supported success (IRIS Center Peabody College Vanderbilt University Nashville, 2020). According to IRIS Center Peabody College Vanderbilt University (2020), relying on EBPs decreases the amount of resources, time, and energy otherwise wasted on attempting interventions that are unlikely to succeed.
An EBP is a type of intervention that has a strong scientific research basis to support its use with a target population (IRIS Center Peabody College Vanderbilt University Nashville 2020; Wong et al., 2014). An EBP is the gold standard for intervention accountability and effectiveness. Currently, the National Professional Development Center on ASD has identified 27 EBPs that are effective for use with children identified with ASD (Wong et al., 2014). Some of the more well-known EBPs are (a) functional communication training, (b) cognitive behavioral intervention, (c) antecedent-based interventions, (d) exercise, (e) pivotal response training, (f) task-analysis, (g) extinction, and (h) discrete-trail teaching (Wong et al., 2014). As empirically supported interventions, EBPs are applied by skilled Board Certified Behavior Analysts (BCBAs) to create cohesive programs that are delivered to clients diagnosed with ASD during behaviorally-focused therapy sessions known as applied behavior analysis (ABA).
**Applied Behavior Analysis**

Behavior analysis is the study of the factors that influence a living organism and is broken down into three branches: applied behavior analysis, behaviorism, and experimental analysis of behavior (Cooper et al., 2007; Weiss & Zane, 2013). While the terms behavior analysis and ABA often are used interchangeably, it is important to note the distinction in terminology. ABA therapy provides a place where the principles of behavior analysis can be utilized in practice to effectively teach new skills and decrease maladaptive behaviors (International Board of Credentialing and Continuing Education Standards, 2020).

Topographically defining an ABA session is difficult due to the heterogenous nature of the treatment packages. For example, sessions may incorporate many children or simply focus on one child. Furthermore, sessions can occur in the client’s home, school, or out in the community (Autism Speaks, 2021). Although ABA may lack a specific framework for structuring treatment sessions, all ABA sessions are directly tailored to the specific needs of each client and focus on improving communication skills, attention, and focus, while decreasing problem behaviors (Autism Speaks, 2021).

The accumulated research supports the fact that when ABA is implemented during a child’s early developmental years in highly intensive doses, it can help to reduce problem behavior while simultaneously teaching critical life skills (Association for Science in Autism Treatment, n.d.). Autism Speaks (2021) parallels those conclusions, stating that long-term (i.e., one to three years) and intensive (i.e., 25-40 hours a week) ABA therapy can result in improved outcome measures for both children and adults. The groundbreaking work of Lovaas in 1973 represented an initial effort to use empirical evidence supporting the life altering possibilities of comprehensive ABA treatment programs for individuals with ASD (Leaf et al., 2017). However,
for this type of therapy to be most effective, practitioners must be well trained to implement the intervention plans.

**Applied Behavior Analysis Professionals.** The importance of ensuring that qualified professionals are providing effective and empirically-supported behavior analytic services was highlighted in 1998 when the first nationwide accreditation board was created to certify behavior analysts (Leaf et al., 2017). This board, the Behavior Analyst Certification Board, developed a position statement that declares that board certification not only permits BCBAs to function as independent practitioners and provide behavior analytic services, but also allows them to oversee the work of other therapists who implement behavior-analytic interventions (Behavior Analyst Certification Board, 2020). Expert BCBAs are trained to assess a child’s skill strengths and deficits, collect and monitor data, and develop programs that focus on supporting socially significant changes for their clients. Training for the certification takes place throughout the BCBA’s graduate work and includes additional ABA specific coursework as well as supervised hours of fieldwork. It is common practice for many ABA companies to have a BCBA meet with and assess a client’s strengths and deficits, then create an intervention package based on EBPs with the goal of enhancing the client’s overall quality of life. The intervention packages are often delivered during ABA treatment sessions by paraprofessionals known in the ABA field as registered behavior technicians (RBTs). Due to the complex nature of the ABA interventions packages created by BCBAs, RBTs require direct and intensive training pertaining to various ABA techniques dictated by the BCBA as necessary for different clients’ treatment packages. Furthermore, because evidence supports the notion that treatment plans carried out with high treatment fidelity can predict higher client outcomes (Domitrovich et al., 2010), it is imperative that RBT training be formalized and consistent. As such, in 2013, the Behavior Analyst
Certification Board (BACB) addressed the need to formalize the training of the paraprofessionals tasked with executing the BCBA treatment programs by developing the Registered Behavior Technician (RBT) certification.

**Registered Behavior Technician Role.** The BACB reported that in 2016 the number of RBT candidates who applied for the exam was around 9,500. That number skyrocketed to approximately 30,500 for the exam administered in 2019 (BACB, 2020). Though this increase in possible RBTs might suggest saturation in the field, many companies are still continually looking to add and retain staff. With ever-growing numbers of ASD diagnosis, this upward trend in hiring RBTs is not expected to stop, further increasing the need to examine and develop better protocols for initial training and continued support. Additionally, hiring an RBT and providing that hire with proper training and support not only ensures regular delivery of prescribed services for clients, it also fosters the opportunity to build rapport with the stakeholders (i.e., clients and parents) on their caseload while resulting in monetary savings for the ABA companies. These monetary savings come through the reduction of the time and resources used to find and train new RBTs and have them rebuild rapport with their new clients before being able to begin more difficult programming. Depending on how abruptly a RBT leaves a position, BCBAṣ may not have time to hire a replacement, which could lead to gaps in the interventions for clients. As Kazemi et al. (2015) stated, disruption in services may negatively impact the client’s progress, add stress to remaining employees, and could even influence the perceptions of the client’s parent or guardian regarding the effectiveness of the intervention. Increasing understanding of RBT initial training needs and preferences can possibly lead to better trained staff, decrease the rate of turnover, strengthen the skill sets of current RBTs, and result in numerous incidental positive outcomes for all stakeholders.
**Registered Behavior Technician Training.** RBTs are paraprofessionals who implement ABA treatment plans under the direct supervision of certified behavior analysts. The RBT’s roles consist primarily of data collection for skill acquisition and behavior reduction interventions created by a supervisor (AppliedBehaviorAnalysisEDU.org, 2020). They do not independently design interventions, nor do they conduct assessments. RBTs often work in stakeholders’ homes or clinics providing one-on-one care to clients. To excel in the position, RBTs must have superior communication and time management skills, as well as a notable ability to multitask.

**Registered Behavior Technician Qualifications.** An RBT must meet certain criteria before acquiring the title and working as a paraprofessional in the field. To be eligible to become an RBT, the candidate must be at least 18 years old, have a high school diploma, and be able to pass a criminal background check (Carr & Nosik, 2017). Candidates then must complete a 40-hour training course conducted by a BCBA, successfully perform a two-page checklist of skills (see appendix D for full task list) of directly observed competencies as determined by the BACB), and also pass a 75-question multiple-choice exam before earning the title of RBT (AppliedBehaviorAnalysisEDU.org, 2020). The addition of the multiple-choice exam in 2015 added another evaluative layer of candidate performance to ensure that the most qualified practitioners are delivering behavior analytic services to clients.

**Registered Behavior Technician Barriers.** Since the role of RBT is implemented within human-interactions, each day often can present new and ever-changing challenges that the RBT must evaluate and react to in the moment. This adaptability must be supplemented by diligent communication and simultaneously data collection to later present to his or her BCBA supervisor. RBTs must continually be supervised by BCBAs to be able to perform their duties within the scope of their certification (Carr & Nosik, 2017). The dual role of implementing the
BCBAs treatment program while recording relevant data is necessary to ensure behavior plans are empirically-supported and adapted to meet the most current needs of each client. One such difficulty that may affect a therapy session norm would be if a client did not get adequate sleep the previous night. Due to this unexpected change in circumstance, there is a high probability the therapy session may run completely differently than the previous day. Even so, the RBT must still concurrently deliver program prompts, collect data, react to possible maladaptive behaviors, all the while engaging the sleep-deprived client and building rapport. This is but one example of the day-to-day variability within a session to which RBTs need to be able to react accordingly.

**Registered Behavior Technician Certification Limitations.** The regulation of paraprofessionals is intended to protect the public as well as the profession by ensuring that minimum standards are upheld by the RBT certification holders (Carr & Nosik, 2017). Still, questions have been raised regarding the current standards for RBT certification. For example, Leaf and his colleagues (2017) raised a number of concerns, including the length and depth of initial training, asserting that 40 hours has not been supported empirically to be a sufficient amount of time for training. Critchfield (2015) went a step further, questioning whether the training the BCBAs obtained from faculty, often with limited research background of their own, is sufficient to model skills for practitioners who are then able to use those newly acquired skills and train RBTs. Other have expressed skepticism about ambiguities in the evaluation of the RBT task list of directly observed competencies (Leaf et al., 2017). A task list item may require the RBT to demonstrate the ability to use reinforcement correctly with a client. In one situation, for example, a BCBA may simply accept an RBT offering a client a high five for correctly selecting the right target while, another BCBA may require a full preference assessment (a more scientifically accurate and time-consuming approach) before determining any given item to be
positively reinforcing. This variability from one circumstance to the next would result in two very differently trained technicians who both passed the same task list item, which could then lead to differently implemented treatment plans. Other task list concerns, not being limited to the subjectivity of the BCBA’s assessment, including key topics possibly missing from the checklist (i.e., data interpretation and behavior skills training; Leaf, 2017). To summarize, the concept of formal RBT certification represents progress toward ensuring fidelity and high-quality services for clients who receive ABA service and yet, gaps remain in the training process that, once addressed, can strengthen the overall effectiveness of the RBT.

**Rationale for this Study**

ABA is an effective evidence-based early intervention approach for children diagnosed with ASD. ABA programs are developed by BCBAs and often are implemented by RBTs. This oversight or hierarchical system permits one BCBA to serve ethically a larger population than they could reach otherwise, as one BCBA can oversee multiple RBTs instead of providing services directly to only one child. With such essential roles, RBTs must have extensive training in order to deliver ABA services with high fidelity and follow the service plan for the client consistent with the way the BCBA designed the session to be implemented. To ensure the RBT implements the programs accurately and consistently, adequate initial training and subsequent support is imperative.

Given the earlier data on the rapid growth in ASD diagnoses, coupled with the efficacy of early intervention behavioral therapy in blunting developmental delays and promoting critical life skills, the need exists to address the education of the people who deliver these vital services. The method of review and certification of personnel who administer ABA programs to children with ASD could be a source of concern. However, a review of the accumulated research yielded
only four studies conducted with behavioral science staff members that focused on feedback/training of staff and parents. This paucity of research, or lack of information and data on training and support for RBTs, underscores the need for additional research in this area. It is ironic that the amount of research in EBPs continues to grow substantially while little is known about the professionals responsible for their implementation. This discrepancy was supported by many of the authors cohort specifically, Granpeesheh (2010) and Hassan (2017) who stated that, despite the growing support for various EBPs to be utilized with participants diagnosed with ASD and the effectiveness of ABA, there continues to be little information on the training of the qualified practitioners entrusted to provide those services (Granpeesheh et al., 2010, Hassan et al., 2017). Furthermore, the importance of providing adequate evidence-supported training of RBTs is ever more pressing as the rates of ASD diagnosis continue to rise and the need for more technicians providing ABA services increases as well.

Therefore, the purpose of the present study was to collect information directly from current RBTs on the methods that were used during their initial training, as well as their preferences regarding those various methods. Information regarding current training methods, as well as trainee responses to the methods and overall job satisfaction was collected to examine how to create more effective and well-rounded training packages for future RBTs. With more effective and critically preferred training packages RBT satisfaction should increase while attrition rates decrease. One possible outcome would be the ability to develop more effective packages with which is to properly train and support RBTs to deliver high quality ABA services, or services with high fidelity, to children diagnosed with ASD.
Summary

The purpose of this dissertation research was to create a measure and collect preferences from current RBTs on their initial and continued training methods utilized to prepare them for their roles as paraprofessionals delivering ABA services. This study is organized into five chapters. In Chapter one, the researcher provides background understanding of what ABA is, the role of the RBT and the need for the current research. In Chapter two, the researcher presents an overview of the literature published with similar themes. In Chapter three, the researcher describes the methodology of the current study. In Chapter four, the researcher presents a thorough analysis of the data and its results. Last, in Chapter five, the researcher discusses the implications from the results and offers suggestions for future researchers.
CHAPTER TWO

REVIEW OF THE LITERATURE

In this chapter, the researcher will present a review of the training and feedback styles within the current published literature. More than a thousand articles were skimmed to identify and include the most relevant studies in the literature review. A comprehensive review of the literature was essential to support the survey distributed to RBTs across the country contained the most current and complete list of training methods available and included supervisory feedback. The researcher examined the literature for articles that analyzed the accuracy or effectiveness of various training or mentorship interventions in the field of teaching and behavioral science. During this process, the researcher found 12 of the most relevant articles on training and supporting RBTs.

Method of Literature Search

The following databases were searched in March, 2020 to locate articles for the current literature review: ProQuest, APA PsyNET, ERIC, Wiley, and PubMed. The keywords or phrases used were: (a) training methods, (b) coaching, (c) supervision, (d) mentor, (e) behavior technician, and (f) pre-services teacher. All six key words were searched across the five databases. There also were some minor variations in the inclusion criteria applied based on the availability of the websites from one database search to the next. These variations included selecting articles that were published in English, had full-text, and peer-reviewed filters to be applied to each database search. To ensure the information being presented was the most current available, database searches were confined to the previous five years, thus excluding any articles published before 2015. This date was selected because it aligned with the last component added to the RBT certification process; safeguarding that the articles selected were current on
onboarding and training. Figure 2.1 provides a visual breakdown of how the search was completed.

**Search Procedures**

The search of the ProQuest database resulted in 62 articles that appeared to fit the initial search criteria. The search of the APA PsyNET database with the key words resulted in many articles regarding the clients who receive ABA but did not specifically focus on the RBTs, so the additional criteria of *Adulthood, Young adulthood, Thirties, Middle-aged, or Aged*, were added to the APA PsyNET search criteria. This secondary search resulted in 602 potential articles. The ERIC database search produced a total of 138 potential articles requiring more careful analysis. The search of the Wiley database from the last five years identified 268 articles that fit the initial search terms. Finally, PubMed database search yielded 28 articles published in the past five years that met the initial search criteria.

**Inclusion and Exclusion Criteria**

A total of 1,098 articles were located from the initial searches across the five databases. The following exclusion criteria was applied to the articles (a) kids/teens, (b) athletic coaching, (c) non-English language, and (d) people with disabilities, paring down the total to 68 abstracts to be screened for eligibility in the current literature review. Of those, 42 were excluded as they covered unrelated topics such as teaching young students and coaching in the workplace, resulting in 26 articles that fit the literature review criteria. While analyzing those 26 articles to determine which would be most applicable to the current study, an additional eight relevant articles were located via a hand search of their references and citations. After completing a final in-depth analysis of these 34 articles, key variables were scrutinized while considering the What Works Clearinghouse (WWCH) standards in mind. This standardized framework was paralleled
to ensure the highest quality of results were available for analysis and presentation in a review of the literature. The groundwork for this was established by immediately removing articles lacking these essential variables. The WWCH standards that were utilized across articles were interventions that had been published in a relevant time frame, had an eligible research design, described participants in sufficient replicable detail, and focused on the effects of the interventions (U.S. Dept. Ed., n.d.). Based on these standards, 22 of the articles lacked essential aspects to ensure that they qualified as rigorous studies. The majority of articles rejected lacked either a clear methodology or a sufficient amount of replicable detail. After all criteria had been applied, 12 articles remained in the current literature review.

**Final Articles Included in Literature Review**

The 12 articles examined were read to assess the type of training utilized (initial or continued), identify if the type of feedback (direct or delayed), if social validity data were gathered, and how the interventions highlighted were tested. A more focused and in-depth evaluation of each article, and how each one fits into the various categories, is presented in later sections of this chapter. A visual breakdown of each article, along with coded variables can be found in Table 2.1, presented at the close of the study.

**Definitions of Codes**

The information extracted from the articles was categorized into a coding system developed by the researcher. This method was selected to provide additional support in synthesizing the similarities regardless of the differences across the articles. After numerous reads and re-reads, four key themes emerged; (a) type of feedback (Direct In Person, Delayed, Direct Technology Assisted); (b) type of intervention (initial, continued); (c) intervention measured (accuracy, effectiveness); and (d) whether social validity data was gathered.
Feedback. The 12 articles were analyzed critically to catalog the various training types that were organized into three groups: 1) direct in-person, 2) direct technology-assisted, and 3) delayed feedback. Direct in-person training was described as any training that occurred in the physical presence of the BCBA, who provided feedback the moment the training occurred. Included in direct in-person training scenarios is the most typical training situation, one in which the trainer shadows the trainee and critiques the session as it occurs in the moment. Direct technology-assisted training was defined as supervision by a BCBA who is not physically present but who provides feedback to the trainee live in the moment through some form of technology. An example of this type of training is a BCBA using bug-in-ear Bluetooth while observing a session virtually and offering direction as the session unfolds. Delayed feedback, the final category, identifies learning opportunities in which a BCBA observes a session, takes notes and then provides corrective feedback at a later time. An example of this type of feedback is a BCBA who observed an RBT live in action and schedules a meeting for the next day to review their notes together.

Training. The three types of feedback presented above were further categorized based on the type of training. Types were coded based on when the training occurred in relation to the RBT receiving certification, initial training, which occurs prior to the certification, and continued training, which takes place after the RBT is officially certified.

Intervention Analysis. The method the authors utilized to test the independent variable; whether comparing two interventions to test for effectiveness of intervention or evaluating if one specific intervention was accurate, also was evaluated. This form of evaluation of the intervention was selected, rather than specific scrutiny of the measures across articles, to be able
to present the data in the most collaborative and cohesive format for articles with very different methodologies.

**Data Extraction**

The information extracted from the articles was categorized into a coding system developed by the researcher. This method was selected to provide additional support in synthesizing the similarities regardless of the differences across the articles. After numerous reviews and analysis, three key themes emerged, (a) type of feedback (Direct In Person, Delayed, Direct Technology Assisted) (b) intervention measured (accuracy versus effectiveness), and (c) if social validity was gathered.

These categories were selected as they are fundamental to understanding the various aspects of the current study. The first themes, type of feedback, aided the researcher in completing the RBT survey. While concurrently completing the review of the literature the researcher also compiled a list of strategies mentioned by the various authors to ensure survey respondents had an extensive list from which to select their answers. The final two categories aided in the understanding of the survey results. Social validity is defined as the acceptability, practicability, and contextual alignment of interventions in practice (McNeill, 2019). Detailed information about social validity, participants, independent variables, along with study design was gathered to deepen understanding of the articles.

**Procedural Fidelity.** Interobserver (IOA) agreement of the types of feedback delivered in each study was analyzed to increase the credibility of the codes applied to each article and to underscore the validity of claims made by the researcher writing this review. To further enhance the trustworthiness of the author’s codes and procedures, a graduate student was chosen to code the final 12 articles blind to the researcher’s predetermined categories. The graduate student’s
academic focus in behavioral science was an essential aspect to validate her ability to fully comprehend the articles (i.e., understanding the terminology and methodologies utilized).

Initially, both the researcher and the graduate student coded each of the 12 articles for the type of feedback delivered. Once both reviewers completed their coding, the initial IOA was gathered. The IOA was reached by taking the number of agreements (11) and dividing it by the number of agreements plus disagreements (19). This resulted in an IOA of 58%. The two reviewers fully agreed on the coding for five articles, had partial agreement on five articles, and fully disagreed with two articles. The researcher met with the graduate student rater to discuss the definitions of the types of feedback and to review disagreements. After this meeting both individuals once more separately reviewed the studies and coded the 12 articles for the type of feedback that had been used. This time 16 agreements were reached with only one disagreement remaining, resulting in a final IOA of 94%. The graduate student’s coding occurred blind from the researcher, even so, it resulted in a 94% overlap of findings. This inter-observer agreement percentage provides the reader with additional data to enhance their overall level of confidence with the author’s results.

**Comparative Results**

As previously stated, the author coded the studies based on the type of feedback delivered: direct in-person (Andzik & Schaefer, 2020; Blackman et al., 2020; Granpeesheh et al., 2010; Hassan et al., 2017; Lerman et al., 2015; Luiselli et al., 2010; Wright & Kaiser, 2017), direct technology-aided (Ausenhus & Higgins, 2019; Comer et al., 2017; Ortiz et al., 2020; Slim-Topdjian & Zipp, 2016), and delayed (Blackman et al., 2020; Granpeesheh et al., 2010; Hassan et al., 2017; Henderson-Harr et al., 2016; Slim-Topdjian & Zipp, 2016). If the authors of each study focused on the descriptiveness or accuracy of a single intervention (Andzik & Schaefer,
(2020; Ausenhus & Higgins, 2019; Henderson-Harr et al., 2016; Lerman et al., 2015; Luiselli et al., 2010; Ortiz et al. 2020; Wright & Kaiser, 2017) or if they compared two interventions to support effectiveness (Blackman et al., 2020; Comer et al., 2017; Granpeesheh et al., 2010; Hassan et al., 2017; Slim-Topdjian & Zipp, 2016). The final category identified by the author pertained to whether social validity was gathered by the research teams (Andzik & Schaefer, 2020; Ausenhus & Higgins, 2019; Blackman et al., 2020; Comer et al., 2017; Hassan et al., 2017; Lerman et al., 2015; Luiselli et al., 2010; Ortiz et al., 2020) or if none was obtained (Granpeesheh et al., 2010; Henderson-Harr et al., 2016; Slim-Topdjian & Zipp, 2016; Wright & Kaiser, 2017).

Brief Article Overview

The vast differences in articles located are presented by the researcher in the codes determined for ease of synthesis. Before presenting each article in the category under which it fell, each article will be introduced briefly. Blackman and colleagues (2020) utilized a between subject design to measure the effectiveness of a direct in person and delayed feedback method with parents of children with ASD. Comer et al. (2017) employed a pre/posttest methodology to determine the effectiveness of two direct technology aided interventions utilized with parent child dyads. Hassan and his research team (2017) employed a multiple baseline design to determine the effectiveness between a direct in-person and delayed feedback intervention package with graduate students. Ortiz and cohort members (2020) utilized a pre/posttest method to evaluate the accuracy of a direct technology aided intervention with practitioners. Andzik and Schafer (2019) used a multiple probe across participants to assess how accurate a direct in-person feedback method is with pre-service teachers. Henderson-Harr et al. (2016) investigated the accuracy of a delayed feedback intervention with research administrators. Slim-Topdjian and
Zipp (2016) relied on a pre post design to assess the effectiveness of a direct technology aided intervention and one that employed delayed feedback with student teachers. Wright and Kaiser (2017) used a multiple baseline across behaviors to replicate the accuracy of direct in-person feedback with parents. Ausenhus and Higgins (2019) also used a multiple baseline design, yet they focused on the accuracy of direct technology-aided feedback for new clinical staff. Granpeesheh and colleagues (2010) investigated the effectiveness between a direct in-person and delayed feedback method with newly hired RBTs. Lerman and researchers (2015) evaluated the accuracy of direct in-person feedback with adult RBTs with ASD. And last, Luiselli and his team (2010) investigated the accuracy of a direct in-person feedback intervention with newly hired RBT staff. A brief overview of additional article components can be found on Table 2.2.

Types of Feedback

The following sections present a synthesized understanding of each of the final 12 articles included in this review. The articles are presented based on the codes determined by the researcher.

**Intervention Type.** Seven of the 12 studies examined whether a single specific intervention feedback was accurate in aiding or establishing certain skills (Andzik & Schaefer, 2020; Ausenhus & Higgins, 2019; Henderson-Harr et al., 2016; Lerman et al., 2015; Luiselli et al., 2010; Ortiz et al., 2020; Wright & Kaiser, 2017). Though the studies reviewed different interventions, the researcher analyzed the nominal data into the three established feedback categories. Of the seven articles that evaluated the accuracy; four (Andzik & Schaefer, 2020; Lerman et al., 2015; Luiselli et al., 2010; Wright & Kaiser, 2017) analyzed the direct in-person feedback strategy, two author cohorts (Ausenhus & Higgins, 2019; Ortiz et al., 2020) scrutinized the accuracy of direct in-person feedback that was aided by technology, and one study
(Henderson-Harr et al., 2016) analyzed the accuracy of delayed feedback on the precision of the intervention measures.

**Effectiveness.** Whereas the findings of seven of the 12 articles supported the concept that feedback is essential for teaching and learning, five compared specific interventions of direct versus delayed feedback for effectiveness (Blackman et al., 2020; Granpeesheh et al., 2010; Hassan et al., 2017; Slim-Topdjian & Zipp, 2016). The fifth and final researchers Comer et al. (2017) considered direct feedback with the use of technology in varied locations. Slim-Topdjian and Zipp (2016) compared training package components with direct-technology aided and delayed feedback both with and without mentorship for student teachers instructing students with ASD. The authors reported better results in student teachers who received mentorship versus those who did not. Not surprisingly, participants with a mentor had better performance scores as well as more sustainable outcomes, indicating the value of mentorship and support within the field of behavioral science. Notably, the authors did not conduct a formal component analysis. For that reason, the inherent value of mentorship with direct or delayed feedback can only be indirectly observed. This means the various components, or essential aspects of the mentorship program, were not evaluated separately and that assumptions regarding essential elements had to be made. However, since the mentorship variable was independently manipulated, it can be inferred that mentorship led to greater gains than no mentorship. Results about the timing of feedback were not different enough to support any assertions regarding the delivery of feedback. Blackman et al. (2020), utilized a between-subject design to take an in-depth look at online courses, looking at the differences between delayed feedback versus direct in-person training when used with parents of children with ASD to acquire basic ABA knowledge. They found that both forms of training were significantly more effective than maturation without training. This
finding was supported by comparing the data from the intervention versus the controlled wait-list group. Based on these findings, the authors concluded that online training courses were an effective option for increasing ABA knowledge as well as improving parent-child interactions when barriers exist that prevent training directly in person (Blackman, 2020). Similarly, Granpeesheh et al. (2010) utilized a between group design to assess if in-person direct feedback or independent online training with delayed feedback led to equal gains for newly hired ABA staff. The authors found that newly hired RBTs were able to acquire successfully ABA skills through both traditional didactic direct feedback instruction and through a 10-hour self-paced online package with delayed feedback afterward. Though scores improved for both groups, participant scores were slightly higher in the direct in-person didactic classroom group. One conclusion that can be drawn is that online learning is an acceptable option when direct-in-person feedback style learning is not an option; yet better gains are made with feedback given in the moment. Hassan et al. (2017) also analyzed direct and delayed feedback utilizing a multiple probe across participant dyad design. Their findings further the argument that graduate students can improve their fidelity and quality of services delivered through BST with direct in-person feedback. Hassan and colleagues (2017) highlighted the fact that too often intervention outcomes are scrutinized through client results with minimal attention given to the practitioners’ fidelity of implementation. Viewed together, these results indicate that additional research is needed to better understand what constitutes as best practice when it comes to initial training and how to provide continued support to practitioners.

The final cohort to comparatively analyze types of feedback was Comer et al. (2017) who compared direct-in-person feedback at the clinic versus direct-technology-assisted-in-home feedback to see which was more effective for teaching parent-child interactions. The authors
claim their study is the first to examine telehealth parent training, while highlighting the lack of empirical literature on training and support in the behavioral analytic field. Comer et al. (2017) found that both approaches resulted in high treatment retention, yet parents had a proclivity for in-home technology-assisted sessions to physically traveling to clinics for direct in-person feedback sessions as the former was more accessible to those living in remote and underserved regions. Finally, Comer et al. (2017) support the notion that social validity also plays a role in how effective a training package may be since the parents’ preference was an essential factor in positive outcomes.

**Direct In-person Feedback.** Four studies (Andzik & Schaefer, 2020; Lerman et al., 2015; Luiselli et al., 2010; Wright & Kaiser, 2017) analyzed the direct in-person feedback strategy. This included studies where corrective advice and critiques were offered to the participants in the same instance as the training (i.e., during the training). Of those four studies, half of the author cohorts chose to investigate a direct-in-person feedback embedded within an intervention known as Behavioral Skills Training ([BST]; (Andzik & Schaefer, 2020; Lerman et al., 2015), or equivalent (Wright & Kaiser, 2017). Behavioral Skills Training (BST) is a training strategy composed of four parts: 1) instruction (i.e., the trainee is given explicit verbal or written explanation of skills and proper performance); 2) modeling (i.e., the trainer shows the trainee how to perform a skill); 3) rehearsal (i.e., the trainee is given time to attempt the skill independently); and 4) feedback (i.e., the trainer delivers corrective feedback and praise) (Hassan et al., 2017). The fourth component of BST is what determined the coding as an intervention that used direct-in person feedback. Andzik and Schaefer (2020) presented data to support that BST was effective as a way of teaching pre-service teachers to accurately deliver various behavioral skills. This was accomplished through the utilization of a multiple probe across participants
design to support that pyramidal or train-the-trainer techniques with direct in-person feedback, resulted in pre-service teachers quickly acquiring key skills as well as maintaining those skills with high fidelity after the passage of a year.

In another study that focused on the use of direct in-person BST, Lerman et al. (2015) found this training technique to be highly effective at teaching participating adults with ASD to become RBTs for young children with ASD. The authors utilized two separate multiple baseline across participants’ studies to support the notion that BST with direct-in-person feedback was effective at teaching the participants how to successfully implement mand (i.e., request) training, as well as complex discrete-trial-trainings with children diagnosed with ASD (Lerman et al., 2015). In a third study reviewed that used direct-in-person feedback training through an intervention similar to BST, the researchers also found feedback to be a powerful tool for parents learning to use a verbal teaching package with their children diagnosed with a developmental disability (Wright & Kaiser, 2017). This study also was completed with a multiple probe across participant dyads and replicated previous findings, adding more strength to the authors’ findings that parents can be successfully taught how to implement an intervention with fidelity through a teach-model-coach-review system similar to BST. Furthermore, Wright and Kaiser (2017) claimed that the most impactful portion of their training package was the coaching portion, describing it as a moment during training in which the participant shifts into a role of practitioner leading the session while the expert directly provides constructive feedback and specific praise. While the authors’ description of direct-in person feedback and their anecdotal understanding of the importance of this type of feedback is helpful for the current literature review, a component and parametric analysis of the training package variables would yield more precise information. The final cohort of researchers who published findings supporting the value of direct-in-person
training evaluated traditional didactic teaching for newly hired ABA staff (Luiselli et al., 2010). Luiselli et al. (2010) identified three key aspects of effective training for newly hired ABA staff: 1) ensuring training is time efficient and easily implemented, 2) asserting whether there are better results if the trainer is an expert within the field in which they are teaching, and 3) evaluating the use of outcome measure to determine if the training was effective. Although not without methodological flaws, each of the five studies supported the argument that direct in-person feedback was an effective strategy for disseminating behavioral information and skills within the targeted populations.

**Direct feedback aided by technology.** Ausenhus and Higgins (2019) reviewed the accuracy of direct feedback aided by technology. While Ortiz et al. (2020) explored the effects of concurrent online courses with live remote coaching for practitioners through a pre/post test method. Both studies began by reiterating that practitioners often have a difficult time obtaining evidence-based practices (EBPs) on teaching/training behavior analytic services, particularly those that apply to parents. Ortiz and colleagues (2020) concluded that online courses are sufficient to acquire knowledge but that additional live remote coaching results in practitioners feeling more competent in the application of newly acquired skills. This finding supports the concept that, while providing information is important to understanding services, the acquisition of information should be paired with live remote coaching to improve quality of outcomes and increase overall levels of participant satisfaction. Ausenhus et al. (2019) assessed live technology-aided feedback to evaluate if it led to accurate training of graduate students to enable them to perform preferences assessments (a key aspect of ABA sessions) through a multiple baseline across participants’ design. Ausenhus and his colleague (2019) found that live online courses with real time feedback led to high fidelity of treatment implementation after relatively
few sessions (two to three sessions depending on the participant). Real time feedback also resulted in maintenance of those skills. The authors also found that skills that were taught via telehealth (or online telecommunications) were transferable and could be generalized to other stimuli and learners as well.

**Delayed feedback.** Henderson-Harr and his cohort (2016) evaluated the effect of delayed feedback provided in the form of a mentor program on skills they determined essential for various leadership traits on the job. They paired research administrators with mentors and found that the delayed feedback from a peer directly increased job satisfaction as well as enhanced key leadership traits the researchers were tracking (Henderson-Harr, 2016). The authors reported that the program led to increased collaboration between colleagues as well as improved problem-solving skills of some participants. However, they also found that participants who felt a lack of support before the study began continued to feel a lack of support through the use of the delayed feedback model.

Overall, the seven author cohorts who evaluated the accuracy and fidelity of interventions within the various feedback models provided data that appears to support the concept that participants acquired skills quickly, were able to generalize skills, and could maintain them with high fidelity over time, regardless of the feedback model utilized. One major difference with the level of confidence and support quantified by participants was that those who received feedback in the moment, directly from the expert, either live or through technology, had higher levels of self-assurance on the skills being assessed than those who received feedback at a later time.

**Social Validity**

In the present study, the researcher chose to code social validity data by type of participant: professionals (Ausenhus & Higgins, 2019; Lerman et al., 2015; Luiselli et al., 2010),
students (Andzik & Schaefer, 2020; Hassan et al., 2017; Ortiz et al., 2020) and parents (Blackman et al., 2020; Comer et al., 2017). Four studies did not report social validity data (Granpeesheh et al., 2010; Henderson-Harr et al., 2016; Slim-Topdjian & Zipp, 2016; Wright & Kaiser, 2017) and will not be included in this section. These categories were selected to determine if a participant’s level of education altered overall satisfaction with the various feedback strategies employed.

Professionals. Of the three research groups that focused on examining professionals as their participant pool, two evaluated the social validity of direct in-person feedback (Lerman et al., 2015; Luiselli et al., 2010) and the third examined professionals' perspective of live remote feedback (Ausenhus & Higgins, 2019). Ausenhus and Higgins, (2019) evaluated the use of real time feedback via telehealth for newly hired RBTs that resulted in participants indicating that the online procedure was both effective and acceptable. Researchers noted that participants were satisfied with the technology setup and would recommend the online format to others. Studies conducted by Lerman et al. (2015) and Luiselli and colleagues (2010) involved newly hired staff receiving direct-in person feedback regarding ABA specific skills. Lerman et al. (2015) specifically targeted teaching adults with ASD various ABA related tasks. The researchers found BST with direct in-person feedback was a highly effective intervention for teaching adults with ASD to implement various ABA tasks. Interestingly, the participants themselves were not asked if they thought the interventions were either acceptable and or effective. Rather, other BCBAs were asked to rank the newly hired RBTs diagnosed with ASD to see if they found their newly mastered skills acceptable when compared to a neurotypical new hire. Based on the BCBA rankings, both adults with and without ASD, when taught through direct in-person feedback (e.g., BST) achieved similar outcomes. Luiselli and colleagues (2010) concluded similar
findings, namely that traditional didactic in person feedback resulted in effective, well-trained newly hired RBT staff. Staff in the didactic learning program reported favorable aspects of the training, leading the authors to identify the three key aspects of essential training as previously stated: (a) efficiency of time and ease of implementation, (b) the need for an expert trainer, and (c) the value of outcome measures to ensure the training was effective (Luiselli et al., 2010).

Students. The authors who evaluated graduate students or pre-service teachers were coded as having “student” participants. Two studies took a more in-depth look at graduate students (Hassan et al., 2017; Ortiz et al., 2020), while others reviewed findings from pre-service and student teachers (Andzik & Schaefer, 2020). Hassan et al. (2017) and Andzik and Schaefer (2020) both utilized direct-in person feedback interventions and had participants rank their level of acceptability of the direct feedback interventions. Both studies reported high rankings from participants regarding to both the likelihood of recommending the intervention to others and how well they felt they could implement the interventions themselves. The other research cohort evaluated direct technology-aided feedback (Ortiz et al., 2020). Ortiz et al. (2020) found that graduate students working on increasing their parental support skills through online courses and live remote coaching reported that the online format provided an excellent opportunity to acquire and practice skills.

Parents. The final group of participants from whom social validity data were collected were parents. Blackman et al. (2020) sought to determine whether self-directed online courses with delayed feedback versus in-vivo group classes with direct in person feedback would result in varied ABA skill mastery for parents. They distributed Likert type questionnaires to parents and found that parents believed both online and in-person classes were useful and informative (Blackman et al., 2020). Research conducted by Comer et al. (2017) similarly included validity
data from two sets of parent cohorts who had received training support via technology, one in the clinic and the other in the home. These parents felt there were fewer barriers to their personal training during in-home sessions. The overall outcome measures collected by Comer et al. (2017) for parent sessions supported by technology in the clinic versus those supposed by technology in their homes were similar. This finding was substantiated across both studies, leading the researchers to initially conclude that with appropriate support, informational gains made by parents are similar whether training occurs in person or via technology. However, it also merits noting that parents preferred the use of technology when environmental factors, such as the need to leave home, placed obstacles in the path of learning.

Summary

Though educators have long recognized that feedback is an essential part of the learning process, much remains unknown regarding the most efficacious form of delivery of that feedback (Barrett, Gonsalvez, & Shires, 2019; Lechermeier & Fassnacht, 2018). Lechermeier and Fassnacht (2018) completed a comprehensive review of the literature as it pertained to feedback in the learning process. Their findings are consistent with that of Luiselli et al. (2010), specifically that immediate feedback delivered by an expert is most effective. Accordingly, the present study considered the social validity, timing of feedback with regard to years in the field, and level of education/professionalism by participants. Overall, each of the articles reviewed supported the idea that learners preferred direct feedback regardless of whether it was provided directly in person or if aided by technology.

Within the context of the current study, it was important to determine if throughout the literature there was a marked preference for a certain type of feedback. This literature review resulted in 12 relevant articles. Seven of those articles utilized direct in-person feedback, four
technology-aided feedback, and five examined delayed feedback. Although the number of studies is limited, these widely varying findings appear to indicate that overall, there is no clear preference for one form of feedback over another within the field of behavioral science. Barrett, Gonsalvez, and Shires (2019) support this argument from their findings within the field of psychology, stating that despite the vast amount of studies, they identified only four that utilized EBPs to review feedback and supervision. As the researcher chose to assess the types of feedback and training undertaken by current RBTs with her survey measures, it was essential to first ascertain knowledge of what currently is available in the published, peer-reviewed literature. Given the limited number of studies, caution must be exercised in drawing conclusions, even tentative ones, regarding the findings.
CHAPTER THREE

METHODOLOGY

Current Study: Registered Behavior Technician Survey

This chapter outlines the mixed-methodology study that was completed to evaluate the different training and supervision techniques received by various RBTs across the United States. A survey was distributed to RBTs to gather specific information about their initial instructional experiences (i.e., the training they received before their certification), their continued training (i.e., any instruction they received after their RBT certification), and how they felt about said training. The data were then analyzed using primarily independence testing, as well as descriptive analysis of the data. The main focus of the statistical analysis was the level of satisfaction and preference for various training interventions received by the respondents. The survey functioned as a tool to ultimately determine relationships in training with various feedbacks and job satisfaction. In an effort to optimize RBT retention, the researcher sought to identify the most effective methods to prepare them to administer ABA to the ever-growing population of people diagnosed with ASD. The goal of this study was to gather information regarding the training methods, as well as the RBT’s perspective towards the methods, used to prepare them for their demanding roles as paraprofessionals in ABA.

Procedures

The first step in this study was to analyze and summarize the current publications supporting the best practices of training specifically focused on the timing of feedback delivery to the trainee, as well as their preferences for said interventions. From the RBT training information gathered, the researcher was able to create the categorical questions for the survey distributed in order to collect data for the current study. During the initial investigation of online
resources, a limited number of studies were identified, further supporting the need for a study to specially target training interventions for RBTs.

After completing the review of the literature, the researcher created a survey and obtained IRB approval to disseminate it across various social media sites targeted at the specific population. While awaiting IRB approval, a draft recruitment letter and survey were created with the use of a blueprint and a behavioral content expert (i.e., BCBA), as well as a qualitative research content expert (i.e., PhD statistician). Once IRB approval was received, the survey was disseminated to the target population via the preapproved platform (e.g., facebook). The survey did not exceed 10 minutes for each of the voluntary anonymous respondents to complete. The recruitment letter stressed the voluntary response and advertised anonymity. The survey was left open for the IRB approved 30 days and garnered 51 responses. Once the survey was closed, the results were organized and analyzed for patterns within the data. Multiple chi-square tests were employed by the researcher looking to determine the independence of the recipient’s perspective of training and job satisfaction. The tests quantified any statistically significant amount of variance present between the expected count versus the observed count of levels of satisfaction with regard to the initial and continued training packages (i.e., testing if training packages that incorporate more types of feedback lead to higher levels of satisfaction). Chi-square tests were selected for the analysis since the data collected was ordinal and discrete. The following sections will encompass the methods, results of the survey, discussion of the results, and suggestions for future studies.
Method

Descriptive Analysis

This descriptive comparative study utilized a mixed methodology approach to gather information from targeted participants. Information was retrieved online via various social media platform sites frequented by the participant pool. The researcher sought to collect information from current RBTs on the interventions used to prepare them for their roles, interventions used during their continued training, as well as their impressions and reactions to those interventions. The brief questionnaire took less than 10 minutes to complete and included 12 questions: five demographic questions, one Likert-type scale question, four open-ended questions, and seven closed-ended questions. It should be noted that some of these offered the choice for an “other” reply and space for an unstructured response. Once the data were gathered, it was analyzed using descriptive and analytic procedures.

The researcher evaluated each survey response and determined the best form of analysis for the data. This was completed by first visually analyzing key questions into bar and pie charts to aid in understanding of patterns and relevance within the dataset. The information obtained from the visual analysis led the researcher to complete three chi-square tests to determine varied aspects of RBT satisfaction with dependency on types and variety of feedback, both in initial and continued training. The three chi-square independence tests examined the variety of training types utilized. The researcher focused the first chi-square test on the total number of types of feedback received across the initial training variable and RBT satisfaction. The second test was to determine whether satisfaction was independent of the number of cumulative training received in both the initial and continued variables. The last chi-square test sought insight into RBT satisfaction and whether a respondent received their preferred form of training. Furthermore, the
researcher analyzed survey reliability data by comparing participants’ results to their own statements. This was completed by asking respondents two similar questions at different points in the survey, then comparing both answers to get some measure of how consistently each respondent answered the questions.

**Statistical Analysis**

The first chi-square test was set up to determine any statistically significant differences in satisfaction and the variety of initial training. The five satisfaction Likert values were grouped into two categories: *satisfied* and *not satisfied*. The *not satisfied* category (Likert scores 1-3) included very dissatisfied, dissatisfied and neutral responses. The *satisfied* category (Likert scores 4-5) included only satisfied and highly satisfied responses. The total number of types of feedback delivered across the initial training variable was based on the sum of each of the interventions listed. If a respondent indicated having engaged in two types of direct in-person training (i.e., modeling and role play), and a delayed form (i.e., peer mentoring) for their initial training package, this was coded as having engaged in three total types of interventions. This means that during their initial training the respondent took part in three of the 10 intervention types which the researcher derived from the initial literature review as explained above.

The second chi-square test was setup to determine any statistically significant differences in satisfaction and the variety of cumulative training. It was determined that cumulative training, or assessing the data across both the initial and continued training for a participant, was vital to understanding a more complete picture of the training received. Similarly, the five satisfaction Likert values were grouped into two categories: *less satisfied* and *highly satisfied*. This broader categorization allowed the researcher to consider participants who were the most content with their current positions. The *less satisfied* category (Likert scores 1-4) included very dissatisfied,
dissatisfied, neutral, and satisfied responses. The *highly satisfied* category (Likert score 5) only included the highly satisfied responses. The types of feedback were generalized into the key categories: DiP, DTA, Dy, and Other, across the respondents’ initial and continued training. To parallel the initial example, if a respondent indicated having engaged in two types of direct in-person training (i.e., modeling and role play), and a delayed form (i.e., peer mentoring) for their initial training package, this was coded as having engaged in two total types of feedback. This means that during their initial training the respondent took part in two of the four feedback categories.

The third chi-square test was designed to determine any statistically significant differences in RBT satisfaction if the participants received their preferred form of feedback (i.e., DiP, DTA, Dy, and Other). The five satisfaction Likert values were grouped into two categories: *satisfied* and *not satisfied*. The *not satisfied* category (Likert scores 1-3) was defined as very dissatisfied, dissatisfied, and neutral responses. The *satisfied* category (Likert scores 4-5) included satisfied and highly satisfied responses. ‘Received preferred training’ data was established by cross tabulating responses from ‘majority of initial training’ and stated ‘preferred form of initial training’. If the data indicated that the RBT received most of their training in their preferred form it was coded as *yes*, if the RBT stated a difference in preferred form of feedback and the type utilized for the majority of their initial training, it was coded as *no*. This information was weighed in congruence with the RBTs satisfaction to determine if receiving a preferred form of feedback and training was statistically significant.

Survey reliability data were calculated to better understand how consistently participants read and answered questions and also to discern the possibility that the RBTs may not have fully understood the way each feedback category was explained in the introduction letter (see
Appendix B). The open-ended survey responses regarding training types were compared to the structured responses that listed specific training to determine respondents’ perceptions of training received versus actual training instances as coded by the researcher.

**Recruitment and Setting**

Primarily, all participants recruited for this study were registered behavior technicians, making the key inclusion criteria having received said certification from the BACB. As previously stated, to become an RBT, participants must be older than 18, have no criminal history, hold a high school diploma, and complete the RBT assessment as administered by the BACB. Any person that did not hold the RBT certification through the BACB was excluded from the survey. Recruitment occurred online via a popular social media platform, thus lack of internet access or an account with the social media platform also were exclusionary conditions. Last, the participants had to speak English, as it was the only language in which the survey was published.

It was decided that the survey would best be disseminated online since the COVID-19 pandemic was occurring which precluded any physical contact with participants. In order to address the naturally narrow pool of participants, RBTs certified through the BACB, specific online RBT groups were targeted and invited to participate with a hyperlink to the survey. In total, five groups received the same message (see Appendix A social media announcement) of recruitment which included the SurveyMonkey™ hyperlink. The five groups: ABA Study Group (41,900 members), ABA Skill Share (28,000 members), Behavior Technician Group (1,800 members), Registered Behavior Technician (1,300 members), and Research in Applied Behavior Analysis (ABA) (1,400 members) provided a total potential population size of 74,400 members assuming the absence of overlapping members in any of these groups. The request for volunteers
was placed on September 8, 2020 at 10:00 am and resulted in 51 participants completing the survey in the allotted time frame of one month as specified in the IRB agreement. Several limitations to the online recruitment process are discussed later in the document.

An in depth breakdown of participants would reveal that 90% of respondents were female, 37% were between the ages of 21-25, and 78% had been an RBT for two years or less. Furthermore, 63% of respondents were located in the Midwest with the next largest percentage of participants, 24%, residing in the northeastern part of the United States. This detailed breakdown of participants can be found in Figure 3.1.

**Research Questions**

As previously stated, the terminal goal of this study was to identify methods of training, as well as RBT’s perceptions regarding such training. Future goals of establishing effective and preferred preparation methods for RBTs drove the research. The four research questions guiding this study towards the initial goal of identifying preparation methods were:

Research Question 1) what is the most common initial training technique currently being utilized to train RBTs?

Research Question 2) what is the most common continued training technique currently being utilized to train RBTs?

Research Questions 3) does the quantity of robust training package from initial and continued training have a direct effect on RBT’s satisfaction with their training?

Research Question 4) does the level of satisfaction depend on whether the RBTs received their preferred form of training?
Institutional Review Board

Approval to implement the survey was requested from the University Institutional Review Board (IRB) at Old Dominion University in Norfolk VA, where the researcher is a doctoral candidate. After approval for the study was received from the IRB, the researcher posted the survey on various online RBT social media outlets. Once a participant clicked on the link to begin the survey, the first page informed them of their rights and consent to be in the study. No personal or contact information was obtained from any of the participants.

Measures

The researcher created a survey focused on gathering specific data from the identified participant pool based on the information retrieved from the review of the literature. The questionnaire consisted of two parts: demographic-related questions and the actual survey questions; 12 questions in total of which eight were targeted at initial training experiences, seven at continued training, and three open-ended questions (see Table 3.1). All were coded and cross-tabulated to show patterns and dependence between variables. Questions of demographics included a participant’s age, location, years in the field, and gender identity. Some demographic information also presented an open ended fill-in to gather information on how RBTs first heard about the field of ABA, if they chose to stay in the field or leave for a position outside of special education, individual descriptions of their initial and continued training, as well as how they believed a specific type of training best prepared them for their current role. Two of the questions detailed nine common types of training methods as noted in the literature, and allowed participants to select any and all that were employed during their initial and continued training sessions. These questions aided the researcher in gathering frequency data on current
interventions being utilized to train RBTs. Table 3.1 Blueprint for Survey contains the blueprint used to develop the RBT training survey.

**Data Analysis**

Descriptive statistics were analyzed for measures of frequency, position, and central tendency. The aforementioned variables of initial versus continued training along with extensive participant background information were cross tabulated to reveal possible patterns in the data. Visuals such as pie charts and bar graphs were created and utilized in the analysis of the data. Furthermore, open-ended questions and their resulting nominal data were categorized and grouped into established codes then analyzed for frequency and percent data to determine the reliability of RBT responses. A blueprint of how to analyze the data was created to aid in clarifying findings; it can be found on Table 3.2 at the end of the study. Last, three chi-square tests for dependency of variables utilizing an alpha of 0.05 were calculated. The chi-square test was selected as data was categorical and not continual and the nonparametric nature of the test was preferred as responses were limited and contained outliers (Boston University School of Public Health, 2017). The null and alternative hypotheses for the three chi-square tests are:

First chi-square test: \( x^2(1, 51) = 18.84, p = .000014 \). This formula denotes a chi-square test that has one degree of freedom and 51 participants. The null hypothesis directly tests the independence between the levels of satisfaction and variety of initial training received by each participant.

\[ H_0: \text{Satisfaction is independent of the variety of initial training.} \]

\[ H_A: \text{Satisfaction is not independent of the variety of initial training.} \]

<table>
<thead>
<tr>
<th>Level of Satisfaction</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
</table>
Highly Dissatisfied,

Dissatisfied and

Neutral 10 25.5

Satisfied, Highly

Satisfied 41 25.5

Total 51 51

K (number of
categories) 2

Second chi-square test: \( x^2(1, 51) = .17, p = .69 \). This formula denotes a chi-square test that has one degree of freedom and 51 participants. The null hypothesis directly tests the independence between the levels of satisfaction and variety of cumulative training received by each participant.

\( H_0: \) Satisfaction is independent of the variety of cumulative training.

\( H_A: \) Satisfaction is not independent of the variety of cumulative training.

<table>
<thead>
<tr>
<th>Variety of Total Training</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1 to 2</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>3 to 4</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>
Third chi-square test: \( x^2(1, 51) = .04, p = .84 \). This formula denotes a chi-square test that has one degree of freedom and 51 participants. The null hypothesis directly tests the independence between the levels of satisfaction and whether the RBTs received their preferred form of training.

**H\(_0\):** Satisfaction is independent of whether the respondent received their preferred training.

**H\(_A\):** Satisfaction is not independent of whether the respondent received their preferred training.

<table>
<thead>
<tr>
<th>Received Preferred Training</th>
<th>Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Satisfaction</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Highly Dissatisfied, Dissatisfied, Neutral</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Satisfied, Highly Satisfied</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td>27</td>
</tr>
</tbody>
</table>

**Reliability**

An initial blueprint was created to enhance credibility of the survey and reliability of the researcher’s findings. For additional content validity, the survey blueprint was reviewed by a subject-matter expert. The interobserver agreements (IOA) of coding applied to the survey’s open-ended questions was performed blindly by qualified graduate students. The reliability of codes was established by calculating the percentage of agreement between raters who coded independently of one another. The raters’ percentage of agreement IOA was 98 percent,
calculated as number of agreed coding over total coding instances. This high percentage IOA provided confidence in the process used to code the data prior to progressing to the statistical analysis. A final calculation of response reliability was planned to evaluate the clarity of the survey’s questions. Two of the survey’s questions required respondents to provide the same information, first by selecting all the interventions used in their training, then stating which form of feedback was mostly utilized for their training. Agreements between respondent stated majority form of feedback and researcher coded feedback forms based on the interventions they selected were tabulated (i.e., if a participant selected all delayed intervention methods but reported the majority of their initial training occurred with direct in-person feedback this inconsistency was coded as no). This coding for response reliability was completed for both initial and continued training.
CHAPTER FOUR
SURVEY FINDINGS

Descriptive Analysis

Participant Demographics

When processing the information from the RBTs regarding the key research questions, it is essential to consider the background and perspectives of the respondents. The participants were predominantly young females who were new to the field of ABA. A more detailed breakdown of the survey respondents would reveal that of the 51 people who participated, 19 were between the ages of 21-25 (M=37.25%), which was the most heavily represented age range. Ten were between 26 and 30 (M=19.61%), and 11 were over the age of 40 (M=21.57%). Only one of the respondents was between the age of 18-20 (M=1.96%), with the remaining respondents falling between the age of 31-35 (M= 9.8%) and 36-40 (M=9.8%). In total 40 participants, accounting for 78.43% of responses, reported having two years or less as an RBT, with the remaining 11 (21.57%) indicating they had been an RBT for 3-5 years. Of the 51 individuals who responded to the survey, 46 (90.20%) indicated that they identify as being female, 4 (7.84%) identified as male, and 1 (1.96%) preferred not to answer. This identified a heavy gender majority in respondents, consistent with the prevailing gender identity seen in the educational community. With regard to participants’ locations, 32 of the 51 (62.75%) people lived in the Midwestern portion of the United States. Of the remaining 37% of participants, 12 (23.35%) lived in the North-East, six in the South (11.76%), and one (1.96%) lived outside of the United States.

When asked how satisfied they felt with their current position, 41 (80.40%) answered either ‘satisfied’ or ‘very satisfied’ displaying a high level of fulfilment with their position, 9
(17.65%) indicated they felt ‘neutral’ in their role, and one (1.96%) chose ‘dissatisfied’. These data are depicted in Figure 4.1 at the end of the study. In congruence with the previous responses, 11 (22.45%) of the 51 respondents indicated that they wanted to leave the field of ABA. Participants were asked how they became familiar with ABA in an open-ended response question. The researcher categorized the responses into four distinct groupings, from ‘friends/family’, ‘school/work’, ‘job posting’, and ‘other’ which can be found in Figure 3.1 at the close of the study. Of the responses collected, 20 (39.22%) participants indicated that they had been introduced by friends and family, ranging from family members with special needs to family members who had worked in the field. Additionally, 15 (29.41%) responded that they were introduced through school or work. Moreover, 13 (25.49%) indicated that they were introduced to the role of RBT through job postings either directly or while researching other related positions. The remaining 3 (5.88%) participants had other means of familiarizing themselves with the role to include watching videos on YouTube™, or some other experiences with people with special needs.

**Research Question Results**

Additional information extracted from the survey was directly correlated to the research questions regarding the most common initial and continued training techniques currently being used to prepare RBTs. Information regarding how the respondents felt about the techniques utilized for their training also was analyzed. Information will be presented in the categories of training, initial and continued, then followed with the social validity information.

In order to identify the predominant methods being used to initially provide training to RBTs, as well as continuity of training and the perceived social validity of the training, the researcher posed a series of questions in the survey designed to target these areas.
**Initial.** Participants were asked under which category they received their initial training with three possible responses available to include ‘Direct in Person Feedback’, ‘Direct Technology Aided Feedback’, or ‘Delayed Feedback’. The majority of respondents, 28 (54.90%) indicated that they had received ‘Direct in Person Feedback’, with 18 (35.29%) receiving ‘Direct Technology Aided Feedback’. In order to further assess means employed during initial training, the researcher offered a variety of methods that could be used during initial training and allowed participants to choose as many as applied. The predominant methods identified for initial training were modeling (86.00%), role play (62.00%), and individual instruction (72.00%). The remaining methods are provided in Figures 4.2 and 4.3 for further evaluation.

**Continued.** The researcher aimed to evaluate methods used to provide continued training for RBTs, with the same categories identified in initial training provided as options for continued training. Of the respondents, 42 (82.35%) indicated that they received continued training through ‘Direct in Person Feedback’, while 5 (9.80%) received ‘Direct Technology Aided Feedback’, and 4 (7.84%) received ‘Delayed Feedback’. While a higher number of participants indicated having received direct in person feedback during their continued training, the predominant methods employed for training remained consistent. Modeling was indicated as being used in continued training by 43 (87.76%) participants, individual instruction by 38 (77.55%), and role play by 33 (67.35%). A more in-depth breakdown can be found on Figures 4.4 and 4.5 at the end of the study.

**Social validity.** Social validity also was taken into account when the researcher designed the survey, with the goal of determining which types of training participants found most effective and would like to continue to pursue. The researcher sought to identify which category the participants felt best prepared them for their role as an RBT. Participants were asked ‘What
category do you wish you were exposed more to during initial training’, to which 27 (52.94%) responded direct in person feedback, 3 (5.88%) ‘Direct Technology Aided Feedback’, 1 (1.96%) ‘Delayed Feedback’, with a surprising 20 (39.22%) indicating that they did not desire to be exposed to more of any of the initial training categories. When asked what form of training the respondents found most prepared them for their roles, an overwhelming majority, 45 (91.84%) indicated that direct in person feedback was the most effective. Only 5 (8.16%) responded that direct technology aided feedback was preferred, while 0 (0.00%) indicated that delayed feedback best prepared them for their role as a RBT. Visual depiction of this data can be found in Figure 4.6 at the end of the study.

Statistical Analysis

According to the results of the first chi-square test, the researcher determined there is sufficient evidence that satisfaction is not independent of the variety of initial training. The chi-square test run was: $x^2(1, 51) = 18.84, p = .000014$. With a p-value of 0.00001 tested at an $\alpha = 0.05$, the researcher rejects the null hypothesis. The data supports the assertion that satisfaction is influenced by the variety of initial training.

<table>
<thead>
<tr>
<th>Level of Satisfaction</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
<th>(O - E)</th>
<th>(O - E)^2</th>
<th>(O - E)^2 / E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Dissatisfied, Dissatisfied and Neutral</td>
<td>10</td>
<td>25.5</td>
<td>-15.5</td>
<td>240.25</td>
<td>9.422</td>
</tr>
<tr>
<td>Satisfied, Highly Satisfied</td>
<td>41</td>
<td>25.5</td>
<td>15.5</td>
<td>240.25</td>
<td>9.422</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
<td><strong>51</strong></td>
<td></td>
<td><strong>18.843</strong></td>
<td></td>
</tr>
</tbody>
</table>
According to the results of the second chi-square test, the researcher determined there is insufficient evidence that satisfaction is not independent of the variety of cumulative training received by RBTs. The chi-square test run was: $X^2(1, 51) = .17, p = .69$. With a p-value of 0.11 tested at an $\alpha = 0.05$, the researcher failed to reject the null hypothesis. The data supports that satisfaction is not influenced by the variety of cumulative training.

**Variety of Training**

<table>
<thead>
<tr>
<th>Types + Satisfaction</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
<th>$(O - E)$</th>
<th>$(O - E)^2$</th>
<th>$(O - E)^2 / E$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 to 2, Highly Satisfied</strong></td>
<td>14</td>
<td>13.333</td>
<td>0.667</td>
<td>0.444</td>
<td>0.033</td>
</tr>
<tr>
<td><strong>1 to 2, Less Satisfied</strong></td>
<td>20</td>
<td>20.667</td>
<td>-0.667</td>
<td>0.444</td>
<td>0.022</td>
</tr>
<tr>
<td><strong>3 to 4, Highly Satisfied</strong></td>
<td>6</td>
<td>6.667</td>
<td>-0.667</td>
<td>0.444</td>
<td>0.067</td>
</tr>
<tr>
<td><strong>3 to 4, Less Satisfied</strong></td>
<td>11</td>
<td>10.333</td>
<td>0.667</td>
<td>0.444</td>
<td>0.043</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>51</td>
<td>51.000</td>
<td></td>
<td></td>
<td>0.165</td>
</tr>
</tbody>
</table>
\[ X^2 = 0.165 \]

\[ p\text{-value} = 0.685 \]

According to the results of the third chi-square test, the researcher determined there is insufficient evidence that satisfaction is not independent of whether the respondent received their preferred training. The chi-square test run was: \( x^2(1, 51) = 0.04, p = .84 \). With a p-value of 0.84 tested at an \( \alpha = 0.05 \), the researcher failed to reject the null hypothesis. The data supports that satisfaction is not influenced by whether the respondent received their preferred training.

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
<th>( (O - E)^2 / E )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(O)</td>
<td>(E)</td>
</tr>
<tr>
<td>Highly Dissatisfied,</td>
<td>5</td>
<td>4.71</td>
</tr>
<tr>
<td>Dissatisfied, Neutral + Pref. Training</td>
<td>5</td>
<td>5.29</td>
</tr>
<tr>
<td>Highly Dissatisfied,</td>
<td>19</td>
<td>19.29</td>
</tr>
<tr>
<td>Satisfied, Highly Satisfied + Pref. Training</td>
<td>22</td>
<td>21.71</td>
</tr>
</tbody>
</table>
The response reliability of the survey was essential for analyzing how consistently RBTs responded across the survey, which was key when making assumptions from their responses. The RBTs reached 90% response accuracy with the continued training codes, and 73% similarity with the researcher’s codes for initial training. It is reasonable to ascertain that the codes established by the researcher were relatively clear and easily understood by the participants. This assumption builds confidence in their responses toward other questions throughout the survey.

Summary

This descriptive comparative study utilized a mixed methodology approach to present information gathered via an online survey of a small sample population. The survey respondents were primarily females, who were satisfied in their current positions as RBTs. The paraprofessionals provided information regarding current interventions being used to prepare them for their roles working with children diagnosed with ASD. The majority of the respondents were trained via methods that utilized ‘Direct in Person Feedback’ such as modeling, and also preferred to receive their training feedback in that manner. Statistical analysis indicated that participants had a proclivity to be more satisfied in their current roles when they had a variety of training types for their initial teachings, regardless of whether it was received in their preferred delivery method or if a variety of methods were utilized in their continued trainings.
CHAPTER FIVE

DISCUSSION

This chapter presents the researcher’s discussion and implications for future studies based on the results obtained from the survey of ABA paraprofessionals also known as RBTs. The survey was designed to collect information on their initial and continued training as well as their preferences toward those interventions. Once the data were collected, the researcher analyzed the various questions with close attention to detail.

When analyzing the results of the survey, questions were scrutinized individually and then cross tabulated. As the terminal goal was to identify the best methods of support for new and seasoned RBTs, the questions regarding their experiences were weighed with their opinions on which they preferred to have been more exposed to during training. RBTs stated they received the majority of their training ‘Direct In Person’, and either desired more face-to-face time (27 of 51 responses) for their initial training, or as 20 of the 51 respondents indicated, they were content with the information disseminated and did not desire further initial training. Moreover, they indicated their initial training involved many instances of modeling, role play, and individual didactic instruction. This led the researcher to consider that an initial training package encompassed of modeling, role play, and live instruction might be most effective for most RBTs.

When considering how overall pleased the RBTs felt, responses such as: desire to stay in the field and length of time in the field, were measured together. None of the 51 respondents reported that they were ‘very dissatisfied’ and only two indicated a desire to leave the field all together. This information led the researcher to conclude that when RBTs are trained, using ‘Direct in Person Feedback’, many RBTs decide to move up in the field and become BCBAs. This was supported by 53% of respondents expressing such conclusions to the survey questions.
Furthermore, when cross tabulating results, none of the respondents had been a RBT for greater than five years, yet interestingly, three participants reported to have been in the field of special education for six or more years. Accordingly, it may well be that those three RBTs had some knowledge of the position before switching from another special education profession. This could mean a respite care worker overseeing ABA therapy sessions for their client and choosing to switch career paths or a teacher’s aide wanting to learn more about some of the techniques used in the classroom. Either scenario indicated a person chooses to pursue a different career path knowingly to become an RBT. Similarly, 10 of the participants who responded that they have been a RBT for 0-2 years claim to have been in the field for 3-5 years, also indicating a possible change in profession. Assuming these data are representative of the larger population this information can be utilized for future practitioners when they are attempting to recruit new potential RBTs. Fifty-four percent of current respondents were recruited in similar professions or in similar programs at school (i.e., education, psychology, special education). This information could also benefit recruiters who could consider posting potential RBT jobs on various job boards outside of ABA programs.

The three chi-square tests run presented results that allowed the researcher to come to some tentative conclusions on best practices with regard to training and supporting RBTs in their roles as ABA paraprofessionals. The data shed some light on the importance of presenting new candidates with a variety of training methods during their initial introduction into the workplace. If a variety of interventions are utilized in their initial training, they generally were more satisfied in their current positions, regardless of whether that robust training package included their more preferred form(s) of feedback. For example, if a respondent listed the use of a two-way mirror to deliver delayed feedback as their most preferred form of training yet actually received the varied
trainings of direct in-person modeling and role play, along with direct technology-aided live distance telehealth and delayed peer mentoring, they were more likely to be satisfied in their current positions than if they had only been trained via the two-way mirror method. Moreover, the variety of initial trainings is far more relevant than the overall training package when weighed against RBT satisfaction. Although somewhat speculative, it may be that it is essential for BCBAs and ABA companies to place heavy emphasis on providing new hires sufficient variety of trainings for their new roles as paraprofessionals working with children diagnosed with ASD.

**Limitations**

The biggest limitation to this study was the COVID-19 pandemic. The virus resulted in many changes to the initial study to reduce the chances of increasing exposure and vector opportunities among participants. Thus, the first aspect of the study involved safe and contact-free recruitment methods for participants. The solution to this constraint was the online enlistment of the RBTs via social media. Out of the possible 74,000+ people who had access to and may have seen the recruitment post, only 51 responded within the 30-day window during which the link was available. In 2019, researchers published an article reviewing online recruitment efforts, in which they reviewed the benefits and barriers to online recruitment through social media sites (Bennetts et al., 2019). In the article, Bennetts and colleagues (2019) claimed that while social media can provide an excellent cost-effective alternative to in-person matriculation, they strongly recommend hiring a social media professional to support the recruitment efforts. They reported that their experience with a single post, like the one utilized in this study, was less likely to lead to high numbers of participants. Instead, they advocated using paid advertisements, reducing text, including a prize to draw incentives, and time consuming
activity of building interest and momentum in key groups, to achieve better recruitment rates. Future researchers should consider the aid of a social media expert if they intend to gather sufficient participants through online efforts. Other limitations of the study included the possible bias presented by the researcher as her primary role as a BCBA.

Another possible limitation includes response bias due to the fact that the survey was not distributed at random. The convince sample allowed only those who wanted to participate to complete the survey, possibly leading to a skew in the results. Additionally, there is the potential lack of reliability of using a researcher created survey as opposed to an evidence-based tool. Notwithstanding the limitations of the present study, there are several potential contributions it makes to the accumulated literature. These include the highlighting of the most effective and most desirable current methods utilized in RBT training, as well as proposing a standardized categorization of feedback methods.

**Implications for Future Research**

Drawing from the results of the present study, future researchers might conduct replication studies to strengthen findings with a larger population pool or further research to determine whether correlations exist between how RBTs heard about ABA and how satisfied they are with their roles, regardless of type of training used to onboard them. This data could shed light on the notion that the field simply “takes the right type of person” and is less constrained to how they are supported and prepared for their roles. Researchers also could use the interventions identified in this study as the basis for a more quantitative examination of effective training packages, how to create them, and also how to best scrutinize them. Another interesting research question could be if certain geographic regions are more prone to certain types of training and RBT satisfaction outcomes. Yet another possible area to investigate the
relationship between job satisfaction and RBT skill proficiency and subsequent to client outcomes. Ultimately, all this information could be directly applied to reduce RBT attrition rates while increasing their overall satisfaction with their role of serving clients with a range of needs.
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https://www.spectrumnews.org/news/evolution-autism-diagnosis-explained/
Table 2.1

Overview of Coded Literature Review Articles

<table>
<thead>
<tr>
<th>Article</th>
<th>Intervention Type</th>
<th>Type of Feedback</th>
<th>Participants</th>
<th>Social Validity Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andzik &amp; Schaefer (2020)</td>
<td>Accurate</td>
<td>DiP</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td>Ausenhus &amp; Higgins (2019)</td>
<td>Accurate</td>
<td>DTA</td>
<td>Professionals</td>
<td>Yes</td>
</tr>
<tr>
<td>Blackman et al. (2020)</td>
<td>Effective</td>
<td>DiP + Dy</td>
<td>Parents</td>
<td>Yes</td>
</tr>
<tr>
<td>Comer et al. (2017)</td>
<td>Effective</td>
<td>DTA + DTA</td>
<td>Parents</td>
<td>Yes</td>
</tr>
<tr>
<td>Granpeesheh et al. (2009)</td>
<td>Effective</td>
<td>DiP + Dy</td>
<td>Professionals</td>
<td>None</td>
</tr>
<tr>
<td>Hassan et al. (2017)</td>
<td>Effective</td>
<td>DiP + Dy</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td>Henderson-Harr et al. (2016)</td>
<td>Accurate</td>
<td>Dy</td>
<td>Professionals</td>
<td>None</td>
</tr>
<tr>
<td>Ortiz et al. (2020)</td>
<td>Accurate</td>
<td>DTA</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td>Lerman et al. (2015)</td>
<td>Accurate</td>
<td>DiP</td>
<td>Professionals</td>
<td>Yes</td>
</tr>
<tr>
<td>Luiselli et al. (2010)</td>
<td>Accurate</td>
<td>DiP</td>
<td>Professionals</td>
<td>Yes</td>
</tr>
<tr>
<td>Slim-Topdjian &amp; Zipp (2016)</td>
<td>Effective</td>
<td>DTA + Dy</td>
<td>Students</td>
<td>None</td>
</tr>
<tr>
<td>Wright &amp; Kaiser (2017)</td>
<td>Accurate</td>
<td>DiP</td>
<td>Parents</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note. Code for types of feedback: DiP- Direct-in-person, DTA- Direct-Technology Aided, Dy-Delayed*
Table 2.2

*In-depth Review of Literature Components*

<table>
<thead>
<tr>
<th>Article</th>
<th>Methodology</th>
<th>Independent &amp; Dependent Variables</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andzik &amp; Schaefer (2020)</td>
<td>multiple probe design across participants</td>
<td>IV: behavior skills training</td>
<td>participants quickly acquired and maintained a high degree of fidelity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DV: maintenance of BST fidelity</td>
<td>with BST</td>
</tr>
<tr>
<td></td>
<td>nonconcurrent multiple-baseline across</td>
<td>was probed one year later,</td>
<td>2-3 sessions (90-135min) online to</td>
</tr>
<tr>
<td></td>
<td>participants</td>
<td>IV: real-time feedback via</td>
<td>meet implementation criteria, skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>telehealth</td>
<td>generalized across items and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DV: procedural implementation</td>
<td>maintained over time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ABA skill (MSWO)</td>
<td></td>
</tr>
<tr>
<td>Ausenhus &amp; Higgins (2019)</td>
<td></td>
<td>IV: in vivo vs online self-paced</td>
<td>parent–child dyads within the in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vs control parent training</td>
<td>vivo and online training groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DV: parent-child interaction,</td>
<td>increased their scores, while waitlist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>knowledge assessment, parental</td>
<td>control group decreased their</td>
</tr>
<tr>
<td></td>
<td></td>
<td>stress, parental competence</td>
<td>interaction score</td>
</tr>
<tr>
<td>Blackman et al. (2020)</td>
<td>between-subjects design</td>
<td>IV: video-teleconferencing with</td>
<td>disruptive behaviors decreased in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>blue tooth in home and in clinic</td>
<td>both conditions over time. Number</td>
</tr>
<tr>
<td>Comer et al. (2017)</td>
<td>pre/post test</td>
<td>DV: parent training on disruptive</td>
<td>of sessions did not differ across</td>
</tr>
<tr>
<td></td>
<td></td>
<td>behavior symptoms and care</td>
<td>conditions (MInternet _ 21.7 vs.</td>
</tr>
<tr>
<td>Granpeesheh et al. (2009)</td>
<td>randomized between group pre/post test</td>
<td>DV: ABA knowledge</td>
<td>MClinic _ 20.8), treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV: self-study baseline, behavior</td>
<td>satisfaction was high across both</td>
</tr>
<tr>
<td></td>
<td></td>
<td>skills training</td>
<td>conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DV: treatment fidelity</td>
<td></td>
</tr>
<tr>
<td>Hassan et al. (2017)</td>
<td>concurrent multiple baseline (w. probe) across</td>
<td>IV: eLearning versus standard</td>
<td>both effective at teaching new skills, yet in-person scores were higher</td>
</tr>
<tr>
<td></td>
<td>participants</td>
<td>in-person training groups</td>
<td></td>
</tr>
<tr>
<td>Henderson-Harr et al. (2016)</td>
<td>pre/post test</td>
<td>DV: ABA knowledge</td>
<td>six of the seven therapists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV: mentorship program</td>
<td>demonstrated an increase in session</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DV: needs and interests of</td>
<td>fidelity after BST training,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>participant, pilot program</td>
<td>preference for BST over self-study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>satisfaction, identify further</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>educational needs</td>
<td>increased engagement, realistic</td>
</tr>
<tr>
<td>Lerman et al. (2015)</td>
<td>multiple baseline</td>
<td>IV: behavior skills training</td>
<td>career goal-setting, job satisfaction, and greater collaboration with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>mentorship</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BST is effective at teaching and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maintaining high procedural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>implementation and generalizations</td>
</tr>
</tbody>
</table>
Luiselli et al. (2010) | pre/post test | IV: didactic instruction | didactic instruction effective at increasing ABA knowledge |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DV: ABA knowledge</td>
<td></td>
</tr>
</tbody>
</table>

Ortiz et al. (2020) | pre/post test | IV: online tutorial combined with live remote coaching | knowledge about disruptive behavior and behavioral parent training increased, performance of skills on behavioral parent-training components increased |
|                    |              | DV: user satisfaction, system usability, evaluation of user satisfaction with training, didactic knowledge |                                                          |

Slim-Topdjian & Zipp (2016) | pre/post test | IV: teacher training package (video self-monitoring, performance feedback, reflection) with and without mentoring | greatest and most consistent improvement was observed among teachers who received mentoring as opposed to those who did not |
|                        |              | DV: learn unit, rate of effective instruction |                                                          |

Wright & Kaiser (2017) | multiple-baseline design across behaviors | IV: teach-model-coach-review trainer to parent | TMCR effective at teaching parents to reach fidelity of implementation (90%), no clear functional relation in child outcomes |
|                        |              | DV: parent intervention fidelity, child learning outcomes |                                                          |

Note: Additional information on articles to provide more well-rounded understanding of literature
### Table 3.1

**Blueprint for Survey**

<table>
<thead>
<tr>
<th></th>
<th>Initial Training</th>
<th>Continued Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct In-person</td>
<td>4, 6</td>
<td>5, 8</td>
</tr>
<tr>
<td>Direct Technology-aided</td>
<td>4, 6</td>
<td>5, 8</td>
</tr>
<tr>
<td>Delayed</td>
<td>4, 6</td>
<td>5, 8</td>
</tr>
<tr>
<td>Open ended Questions</td>
<td>7, 10</td>
<td>9</td>
</tr>
</tbody>
</table>

*Note. Numbers indicate survey questions that evaluate various coded aspects (i.e., question 4 covered direct in-person feedback methods used in initial training)*
Table 3.2

*Blueprint for Data Analysis*

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Survey question #</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pie chart</td>
<td>2, 3, 4, 6*, 7*, 8, 11*, 12*, 13*</td>
<td></td>
</tr>
<tr>
<td>Bar graph</td>
<td>1, 5, 9*, 10*</td>
<td></td>
</tr>
<tr>
<td>Statistical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi-square</td>
<td>10 and 7</td>
<td>Varied Type of Initial Training and Satisfaction</td>
</tr>
<tr>
<td></td>
<td>9, 10 and 7</td>
<td>Total Cumulative Training and Satisfaction</td>
</tr>
<tr>
<td></td>
<td>11, 13 and 7</td>
<td>Received Perceived and Satisfaction</td>
</tr>
</tbody>
</table>

*Note.* Breakdown of data analysis from RBT survey. *indicates graphs included at the end of the current study.
Figure 2.1

Flow Chart of Article Selection

Initial Search: 1,098 Articles
ProQuest (62), APAPsycNET (602), ERIC (138), PubMed (28), Wiley (268)

1030 titles screened to excluded: kids/teens, athletic coaching, non-English language, and people with disabilities.

68 articles abstract screened.

42 Articles Excluded: workplace, school aged students, non-neurotypical population, book reviews

26 articles read for included eligibility criteria.

8 Articles Included: hand search of references

34 articles read for eligibility criteria.

22 Articles Excluded: lacking WWCH standards, duplications

12 articles included in current review.

Figure 2.1. Indicates the process to select the articles for the current literature review.
Figure 3.1

RBT Survey Response to “How Heard About ABA”

How Heard About ABA

- friends + family
- work + school
- job posting
- other

Note 2. Visual depicting survey responses to question #6 asking registered behavior technicians how they first heard about the field of applied behavior analysis.
Figure 4.1

RBT Survey Response to “How Satisfied are You Currently”

Note. Visual depicting survey responses to question #7 asking registered behavior technicians how satisfied they are in their current roles.
Figure 4.2

RBT Survey Response to “Majority of Initial Training”

Note. Visual depicting survey responses to question #11 asking registered behavior technicians what form of feedback was used most during their continued trainings. Codes indicating DiP- Direct In-Person, DTA- Direct Technology-Aided, DY-Delayed
Figure 4.3

RBT Survey Response to “Initial Training Methods”

*Note.* Visual depicting survey responses to question #10 asking registered behavior technicians what form of feedback was used most during their initial training.
Figure 4.4

RBT Survey Response to “Majority of Continued Training”

Note. Visual depicting survey responses to question #12 asking registered behavior technicians what form of feedback was used most during their continued trainings. Codes indicating DiP- Direct In-Person, DTA- Direct Technology-Aided, DY-Delayed
Figure 4.5

RBT Survey Response to “Continued Training Methods”

Note. Visual depicting survey responses to question #9 asking registered behavior technicians what form of feedback was used most during their continued training.
Figure 4.6

RBT Survey Response to “Preferred More Exposure – Initial Training”

![Preferred More Exposure - Initial Training Pie Chart]

*Note.* Visual depicting survey responses to question #13 asking registered behavior technicians what form of feedback they wish they could have been exposed to more during their initial training. Codes indicating DiP- Direct In-Person, DTA- Direct Technology-Aided, DY- Delayed
Appendix A

Survey Recruitment Announcement

Hello RBTs!

I’ve been exploring various training strategies for a team of RBTs and I noticed a gap in the research. To help narrow this gap I developed a survey about RBT initial training and supervision and would really appreciate your input. Your answers will be completely anonymous and will help contribute to how future RBTs will prepare for their role. If you have 10 minutes to spare, I would love to hear about your experiences. Follow the link to begin the survey: https://www.surveymonkey.com/r/Y6LBZ3D.

Thanks so much for your consideration,

Gabi McZ.
Appendix B

Survey Introduction Letter

Hello Registered Behavior Technician:

Thank you for following the link online and taking the time to help with my dissertation. The goal of this study is to gather data on the various strategies that companies are using to train their Registered Behavior Technicians (RBTs). I am especially interested in RBTs who work directly with people diagnosed with Autism Spectrum Disorder. I would like to hear about your experiences and perspectives on the training you received when you were preparing for your work in the field of Applied Behavior Analysis.

The survey should take less than 10 minutes to complete and your responses will remain anonymous; any reporting of the findings will be presented under pseudonyms or in the aggregate. The survey will ask you to about your experiences during initial (i.e., training you received before your RBT cert.) and continued training (i.e., any training after you received your RBT cert.). The various forms of training that the survey will inquire about are: 1) direct in person--where the trainer is physically present and provides verbal feedback in the moment (e.g., in ‘real time”), 2) direct technology assisted--where the trainer is not present but verbal feedback is still given live in the moment (e.g., use of Bluetooth ear receiver device), and 3) delayed feedback--where the learning opportunity first occurs and later is reviewed with verbal feedback (e.g., a one-on-one session several days after the learning experience).

Once you have completed the survey, it will be submitted automatically and nothing more needs to be done by you. If you have any questions regarding the survey or wish to receive a summary of the results, please email me with the subject line “RBT Study Question”.

Should you encounter any issues or have any questions about the survey please do not hesitate reaching out the lead investigator, Dr. Robert Gable 757-683-3157, or the IRB chair for the Darden College of Education, Dr. Laura Chezan 757-683-7055.

Thank you for your time and effort on my behalf!

Gabriela McWhorter Zapatero

Gabriela McWhorter Zapatero, MS Ed., BCBA, LBA

Gmcwh002@ODU.edu

757-719-8374
Appendix C

RBT Survey Questions

The following questions have been designed to collect essential information regarding your initial and ongoing training as an RBT. Your individual responses will remain anonymous and results will be reported under pseudonyms or in the aggregate.

PART I: Demographics
Age- __18-20, __21-25, __26-30, __31-35, __36-40, __41+
# years as RBT- __0-2, __3-5, __6-8, __9+
# years in the field- __0-2, __3-5, __6-8, __9+
Gender M_____; F ______; Other_____; Prefer not to answer______
Current U.S Residence- West___; Midwest_____; South_____; North-East_____

PART II: Survey Questions
1. How did you hear about ABA and becoming an RBT? (e.g., a friend introduced me to it, I have a loved one diagnosed with ASD, I heard about in undergrad and decided to check it out)

2. How satisfied are you with your current position?
   __very satisfied, __satisfied, __ neutral, __ dissatisfied, __very dissatisfied
3. Do you want to: __remain RBT, __become BCBA, __become teacher, __leave field of special education; why:

4. Check off all methods that were used during your initial training:
   Direct In-Person Feedback
   ___Modeling
   ___Role Play
   ___Individual instruction
   ___Small group coursework
   ___Other: (Please specify) ____________________
   Direct Technology Assisted Feedback
   ___Live Distance Courses
   ___Bug in Ear with Video
   ___Other: (Please specify) ____________________
   Delayed Feedback
   ___Video Review
   ___Peer Mentor
   ___Two-way mirror
   ___Asynchronous Courses
   ___Other: (Please specify) ____________________
5. Check off all methods that are used during continued training:
   
   Direct In-Person Feedback  
   ___Modeling  
   ___Role Play  
   ___Individual instruction  
   ___Small group coursework  
   ___Other: (Please specify) _________________________
   
   Direct Technology Aided Feedback  
   ___Live Distance Courses  
   ___Bug in Ear with Video  
   ___Other (Please specify) __________________________
   
   Delayed Feedback  
   ___Video Review  
   ___Peer Mentor  
   ___Two-way mirror  
   ___Asynchronous Courses  
   ___Other (Please specify) __________________________

6. Under what category did you receive the majority of your initial training:
   
   Direct In Person Feedback _____  
   Direct Technology Aided Feedback_____  
   Delayed Feedback _____

7. Please describe your initial training experience: (e.g., I felt most prepared for my job when direct in person feedback was used, I completed my training online without feedback):

   ______________________________________________________
   ________________________________________________________________________________

8. Under what category did you receive the majority of your continued training:

   Direct In Person Feedback _____  
   Direct Technology Aided Feedback_____  
   Delayed Feedback_____  

9. Please describe your continued training experience: (e.g., Personally the type of training doesn’t matter as much as connecting with coworkers, My favorite lead BCBA always gives me delayed and in person feedback) ________________________________

   ______________________________________________________
   ________________________________________________________________________________

10. What category do you wish you were exposed more to during initial training?

    Direct In Person Feedback _____  
    Direct Technology Aided Feedback_____  
    Delayed Feedback_____  
    None____

11. What category best prepared you for your role as an RBT:

    Direct In Person Feedback _____
Direct Technology Aided Feedback _____
Delayed Feedback _____

12. Please explain how this type of training best prepared for your current position? 
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Thank you so much for your time and effort!
Appendix D

BACB Sanctioned RBT Task List

The BACB’s Registered Behavior Technician™ (RBT®) Task List includes the primary tasks that are likely to be performed by behavior technicians with some, but not necessarily all, clients. It is at the discretion of an RBT supervisor to determine any activities outside of this task list that a behavior technician is competent to perform as a behavior technician.

The RBT Task List content serves as the basis for the RBT training requirement and the RBT examination. The Task List is organized into the following primary content areas: Measurement, Assessment, Skill Acquisition, Behavior Reduction, Documentation and Reporting, and Professional Conduct and Scope of Practice.

A. Measurement
A-1 Prepare for data collection.
A-2 Implement continuous measurement procedures (e.g., frequency, duration).
A-3 Implement discontinuous measurement procedures (e.g., partial & whole interval, momentary time sampling).
A-4 Implement permanent-product recording procedures.
A-5 Enter data and update graphs.
A-6 Describe behavior and environment in observable and measurable terms.

B. Assessment
B-1 Conduct preference assessments.
B-2 Assist with individualized assessment procedures (e.g., curriculum-based, developmental, social skills).
B-3 Assist with functional assessment procedures.

C. Skill Acquisition
C-1 Identify the essential components of a written skill acquisition plan.
C-2 Prepare for the session as required by the skill acquisition plan.
C-3 Use contingencies of reinforcement (e.g., conditioned/unconditioned reinforcement, continuous/intermittent schedules).
C-4 Implement discrete-trial teaching procedures.
C-5 Implement naturalistic teaching procedures (e.g., incidental teaching).
C-6 Implement task analyzed chaining procedures.
C-7 Implement discrimination training.
C-8 Implement stimulus control transfer procedures.
C-9 Implement prompt and prompt fading procedures.
C-10 Implement generalization and maintenance procedures.
C-11 Implement shaping procedures.
C-12 Implement token economy procedures.
D. Behavior Reduction
D-1 Identify essential components of a written behavior reduction plan.
D-2 Describe common functions of behavior.
D-3 Implement interventions based on modification of antecedents such as motivating operations and discriminative stimuli.
D-4 Implement differential reinforcement procedures (e.g., DRA, DRO).
D-5 Implement extinction procedures.
D-6 Implement crisis/emergency procedures according to protocol.

E. Documentation and Reporting
E-1 Effectively communicate with a supervisor in an ongoing manner.
E-2 Actively seek clinical direction from supervisor in a timely manner.
E-3 Report other variables that might affect the client in a timely manner.
E-4 Generate objective session notes for service verification by describing what occurred during the sessions, in accordance with applicable legal, regulatory, and workplace requirements.
E-5 Comply with applicable legal, regulatory, and workplace data collection, storage, transportation, and documentation requirements.

F. Professional Conduct and Scope of Practice
F-1 Describe the BACB’s RBT supervision requirements and the role of RBTs in the service-delivery system.
F-2 Respond appropriately to feedback and maintain or improve performance accordingly.
F-3 Communicate with stakeholders (e.g., family, caregivers, other professionals) as authorized.
F-4 Maintain professional boundaries (e.g., avoid dual relationships, conflicts of interest, social media contacts).
F-5 Maintain client dignity.

This document should be referenced as follows: Behavior Analyst Certification Board. (2018). RBT task list (2nd ed.). Littleton, CO: Author.

(Behavior Analyst Certification Board, 2020)