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Collaboration Between Special Education Teachers and Board Certified Behavior Analysts

Megan Elizabeth Squires

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

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ABSTRACT

Collaboration Between Special Education Teachers and Board Certified Behavior Analysts

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Master of Science

As of January 2023, there are 59,976 Board Certified Behavior Analysts (BCBAs) with current licensure throughout the world. This number has substantially grown compared to the meager 392 persons so certified in the year 2000 (Behavior Analyst Certification Board, 2023). In the past 11 years, demand for Board Certified Behavior Analysts has increased by 4,209% (Behavior Analyst Certification Board, 2022). As the need for this resource has increased, the presence of BCBAs is becoming more prevalent in public schools today. A BCBA can be a beneficial and critical resource to teachers in aiding in their behavior knowledge, and classroom management. Since there is a scarcity of BCBAs in schools, it is important that a BCBA's time is spent effectively while working with teachers. To our knowledge, there is little to no research specifically targeting special education teachers and how they interact with BCBAs. A Multiperspectival Interpretative Phenomenological Analysis focus group was conducted with educators who interface with BCBAs. Findings indicated both barriers and affordances attached to special education teachers working with a BCBA. Implications for practice, implications for research, and limitations are discussed.

Keywords: board certified behavior analyst, teacher perceptions, behavior support, collaboration, qualitative research

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CHAPTER 1

Introduction

As of January 2023, there are 59,976 Board Certified Behavior Analysts (BCBAs) with current licensure throughout the world. This number has substantially grown compared to the meager 392 persons certified in the year 2000 (Behavior Analyst Certification Board, 2023). Further, in the past 11 years, demand for Board Certified Behavior Analysts have increased by 4,209% (Behavior Analyst Certification Board, 2022). As the need for this resource has increased, the presence of BCBAs is becoming more prevalent in public schools today.

The Individuals with Disabilities Education Act (IDEA) of 2004 includes functional behavior assessments (FBA) and Behavior Intervention Plans (BIP) for students whose problem behavior interferes with their access and participation in the classroom (IDEA, 2004). IDEA (2004) also calls for evidence-based practices in school settings (Odom et al., 2005). School-Wide Positive Behavior Interventions and Supports is an evidenced-based practice that is widely used for IDEA 2004 compliance throughout school districts (Lane et al., 2007; Walker et al., 2005).

It is no secret that special education teachers face many challenges as is evident in the amount of teacher shortages and persistent attrition rates (Billingsley & Bettini, 2019). In fact, the literature states that each year 13% of special education teachers leave the profession (McLeskey et al., 2004). Nationwide, the U.S. Department of Education and Office of Postsecondary Education found that 46 states were drastically short of special education teachers (Robinson et al., 2019). One frequent explanation for teachers shortages is teacher burnout (Billingsley, 2004; Hagaman & Casey, 2018).

While the literature sets forth various reasons for special education teacher burnout, the reason relevant to this study is that of managing challenging student behavior (Hastings & Brown, 2002). There are higher teacher burnout rates in settings with more students with behavior needs (Nichols & Sosnowsky, 2002).

Statement of the Problem

Because a BCBA's expertise is crucial to helping students with significant behavior challenges, it is unfortunate that the growing number of BCBAs is not mirrored within all public schools, especially those in rural communities (Behavior Analyst Certification Board, 2022; Shriver, 2019; Traub et al., 2017). A BCBA can be a beneficial and critical resource to teachers in aiding in their behavior knowledge, classroom management, and completion of FBAs and BIPs.

However, to our knowledge, there is little to no research specifically targeting special education teachers and how they interact with BCBAs. More research in this area is needed because BCBAs are an untapped resource designed to help support teachers that may significantly decrease teacher burnout due to problem behavior. If more is known about how BCBAs can collaborate with teachers, then perhaps teacher attrition rates will drop.

Since there is a scarcity of BCBAs in schools, it is important that a BCBA's time is maximized and spent effectively while working with teachers. In order to understand how to foster a collaboration between the BCBA and teacher, it is important to understand how a teacher views a BCBA. Findings from this study will fill a void in the literature to help us improve teachers' awareness that BCBAs can provide a much-needed support; thus, reducing teacher burnout and improving their students' success.

Statement of the Purpose

The purpose of this study is to examine how special education teachers within different settings in school districts in an intermountain west state view BCBAs. Researchers intend to explore how special education teachers think about BCBAs through a qualitative study.

Researchers hope to gain a greater understanding of possible helps and hindrances that contribute to higher or lower utilization of BCBAs in schools to improve class and student behavior.

Research Question

This study will address the research question: How do special education teachers think about BCBAs?

CHAPTER 2

Review of Literature

As of January 2023, there are 59,976 Board Certified Behavior Analysts (BCBAs) with current licensure compared to the meager 392 persons so certified in the year 2000 (Behavior Analyst Certification Board, 2023). Demand for BCBAs has increased by 4,209% and appears to be increasing in nearly all public school districts nationwide (Behavior Analyst Certification Board, 2022).

What is a Board Certified Behavior Analyst?

To become a BCBA, a person must meet three eligibility requirements—academic-degree, educational and practical experience—and then pass a psychometrically sound examination (Cooper et al., 2020). The Behavior Analysis Certification Board (BACB) was created in 1998 to oversee and set the criteria for this certification (Shook & Favell, 2008). Within the three requirements, there are four different pathways to certification which require 1500-2000 hours of practical supervised field work in addition to set requirements. In the first pathway, an individual obtains a graduate degree from a program accredited by the Association of Behavior Analysis International. In the second pathway, someone holding a graduate degree then takes the required coursework. The third pathway requires a graduate degree, faculty teaching, and research. Lastly, the fourth pathway requires a doctoral degree and postdoctoral experience in applied behavior analysis. After these qualifications are met, an individual then must pass a 185 multiple choice question examination. Upon passing the exam, the individual is certified. To maintain BCBA certification, one must meet continuing education requirements, adhere to ethics standards, and recertify every two years (Behavior Analyst Certification Board, 2021). Once certified, a BCBA uses the science of Applied Behavior Analysis in all that they do.

Following certification, there are a few different career paths a BCBA can take. The most common is to work in a clinic doing Applied Behavior Analysis (ABA) therapy for children with autism spectrum disorder (ASD). Another common path is to work hands on with students in the classroom. Because a BCBA's expertise is crucial to helping students with significant behavior challenges, it is unfortunate that the growing number of BCBAs in the world is not mirrored within public schools, especially in rural communities (Behavior Analyst Certification Board, 2022; Shriver, 2019; Traub et al., 2017). Shriver describes the roles a BCBA may take when employed by a school as that of a special education teacher or a consultant. In either capacity, they will work collaboratively to design interventions and help with functional behavior assessments (FBA) and behavior intervention plans (BIP) to improve students' performance (Shriver, 2019). Shriver comments on how a BCBA can contribute to a school team:

What a BCBA brings to the team that these other behavioral or mental health professionals typically do not are extensive training and expertise in behavior analysis (e.g., functional behavior assessment) and intervention. BCBAs can assist the team with identifying and defining student concerns and goals, assessing relevant functional environment-behavior relations, developing and implementing evidence-based educational programs and interventions, data collection and progress monitoring, and data-based decision making. (Shriver, 2019, pg. 139)

A BCBA can be a beneficial and critical resource to teachers. "Despite the fact that behavior analysis is, at its core, the science of learning, many schools are not familiar with all that professional behavior analysts can offer to individual treatment planning, classroom management, teacher and paraprofessional training, and school administration" (Traub et al., 2017, p. 5).

BCBAs are hired by schools to address challenging behavior. Many schools have “behavior specialist” hired to attend to problem behavior. The role of a “behavior specialist” is very broad. While a BCBA may be hired to fill that position, a BCBA is trained and ethically obliged to a narrower set of duties than the role of “behavior specialist” as shown in Table 1.

Table 1

Roles of a Behavior Specialist vs Behavior Analyst

Behavior Specialist	Behavior Analyst
Support behavior needs of students	Support behavior needs of students
Support behavior needs of teachers	Support students one on one
Implements and monitors systems	Support school teams
Create and modify BIPs	Create and modify BIPs
Build relationships	
Plan for and handle crises	
Role of a counselor	
Provide students social emotional services	
No specified degree requirements	
No specified training required	

Note. Adapted from Jackson, S. (2020). *Behavior specialist experiences of roles and responsibilities in inclusive trauma informed schools.*

Applied Behavior Analysis

The foundation for ABA began in the early 1900's with the work of groundbreaking psychologists like John B. Watson and Ivan Pavlov. Watson proposed the earliest form of behaviorism with a simple model known as "stimulus – response psychology" (Watson, 1913). Pavlov found that you could manipulate a stimulus to create a response, known as respondent conditioning. For example, in his famous experiment, Pavlov found when food was presented (a stimulus) a dog would salivate (a response; Cooper et al., 2020). Pavlov then paired the presentation of the food with the sounds of a metronome. Over time, the sound of the metronome alone would evoke the same response as the food—the dogs would salivate as if food had been presented (Yule, 1980). Building on Pavlov's research, which was focused on the stimulus that occurs right before the behavior, B. F. Skinner found that behavior is changed more by the consequence that occurs immediately after the behavior (Schlinger & Normand, 2013). After nearly a decade of experiments, B. F Skinner published a book that laid the foundation for what we now call Applied Behavior Analysis (Skinner, 1938). From this scientific discovery, Skinner coined the term "three-term contingency" to describe the relationship between the antecedent (A) stimulus, the preceding behavior (B), and the consequence (C) that follows (Cooper et al., 2020).

The widely accepted definition of ABA today is "the science in which tactics derived from the principles of behavior are applied to improve socially significant behavior and experimentation is used to identify the variables responsible for the improvement in behavior" (Cooper et al., 2020, p. 19). Baer et al. (1968) recommended seven dimensions to ABA that still serve as the defining criteria today: applied, behavioral, analytic, technological, conceptually systematic, effective, and displaying some generality. The first term "applied" in ABA focuses on improving an individual's life in socially significant ways. Second, the term "behavior"

means that ABA is working on behaviors that are observable, and measurable. For example, talking out of turn is a behavior that can be observed and measured. Next, ABA is analytic, meaning you can identify what is causing the behavior change. ABA is technological, meaning precisely thought-out procedures that can be replicated. Next, ABA is conceptually systematic, meaning the procedures used are scientifically sound and grounded in basic behavioral principles. ABA is effective, meaning interventions will be used and adapted until they produce behavior changes that are socially significant. Finally, ABA involves generality, meaning that it can be determined whether a behavior learned in a school setting can be generalized across settings, and people.

ABA as a whole is also generalized in countless aspects of life and with quotidian tasks (Cooper et al., 2020). ABA is most commonly used as an evidenced-based intervention for individuals with ASD (Foxy, 2008). While ABA is mostly used for individuals with ASD, its application extends to various settings, populations, ages, and ability levels. For example, Kurtz and colleagues worked with 30 children under the age of 5 to reduce self-injurious behavior using the principles of ABA (Kurtz et al., 2003). Likewise, Sivaraman studied the use of telehealth to help children with Autism wear masks (Sivaraman et al., 2021). Crabtree and colleagues experimented on the effects of self-monitoring of story elements on the reading comprehension of high school students with disabilities (Crabtree et al., 2010). In a study of 146 adults, 18 years of age and older, Romanowich and Lamb (2015) improved smoking abstinence of participants using principles of ABA. Lastly, Adults with intellectual and developmental disabilities (IDD) through telehealth increased independent living skills by performing tasks such as making a quesadilla (Pellegrino & DiGennaro Reed, 2020). The above examples show that ABA can help increase a diverse array of desired behaviors, while decreasing problem behavior

across a variety of populations, settings, and delivery methods. Thus, Applied Behavior Analysis is at its core a science which focuses on utilizing new ways of learning (Traub et al., 2017).

Applied Behavior Analysis and Positive Behavior Support

A popular form of ABA is called positive behavioral support (PBS). PBS is a framework to support individuals exhibiting challenging behavior and consists of strong values focusing on the quality of life of the individual (Anderson & Freeman, 2000; Carr & Sidener, 2002). While controversial in the field there is much literature that supports and analyzes the fundamental principles of PBS and shows how they are synonymous to the fundamental principles of ABA (Carr & Sidener, 2002). The following sections will highlight how ABA is prevalent in schools today but will not differentiate between ABA and PBS since ABA is all encompassing.

Positive Behavior Supports

Anderson and Freeman (2000) explain how PBS can be helpful in executing ABA. They define PBS as a "framework for developing effective interventions and programs for individuals who exhibit challenging behavior" (p. 86). The framework can be broken down into two parts: values and procedures. The dimensions of PBS are not rigidly defined, however three that are most consistent across the PBS literature are that is (a) person centered values base (b) recognize the individuality of each person (c) they work toward and achieve meaningful outcomes. The PBS framework provides individuals with disabilities or behavioral challenges support in reaching their desired outcomes while using the principals of applied behavior analysis (Anderson & Freeman, 2000).

In response to the above cited article, Carr and Sidener (2002) caution that there is beginning to be an insurmountable amount of support in movement to represent PBS as a distinct discipline from applied behavior analysis (ABA). Due to this movement, they call to attention

the need to understand the long-term ramifications of this separation. They recognize the three main values in PBS and point out that these values are also important to good practice in ABA. While Anderson and Freeman (2000) provided a well-balanced definition of PBS, this has not been the case in other literature in favor of PBS which contains definitions which greatly skew the relationship between ABA and PBS. Evidence of its divide is seen in funding from the state board of education, the creation of the Journal of Positive Behavior Interventions and its presence in educational conferences (Johnston et al., 2006). Ironically meta-analyses have been done for PBS and it is clear in the articles that their methods and explanations are directly attributable to ABA principles. Carr et al. (2002, p. 5) state that the evidence for PBS “moving beyond the parent discipline” is clearly unsupported by the literature and evidence.

Johnston et al. (2006) summarizes this by saying:

In our view, there is no basis for asserting that PBS is a new science. It addresses no new phenomena or subject matter. Neither has PBS developed any new methods for studying or changing behavior. Although proponents of PBS differ on the degree to which PBS methods are derived from or are identical to sound ABA research and practice methods, J. Carr and Sidener (2000) and Mulick and Butter (2005) pointed out that it is easy to document that the behavior-change methods claimed by PBS were documented in the ABA literature long ago. (p. 61)

Applied Behavior Analysis in Schools

ABA has its fingerprints in many aspects of what we do in schools today. The Individuals with Disabilities Education Act 2004 includes FBAs and BIPs for students whose problem behavior interferes with their access and participation in the classroom (IDEA, 2004). It also calls for evidence-based practices in school settings (Odom et al., 2005). School-Wide Positive

Behavior Interventions Supports is an evidenced-based practice that is widely used throughout school districts in the United States (Lane et al., 2007; Walker et al., 2005). FBA, BIP, and school wide positive behavior intervention supports (SWPBIS) are also evidenced based practices rooted in ABA principles that reduce challenging behavior (Gresham et al., 2001).

Functional Behavior Assessment

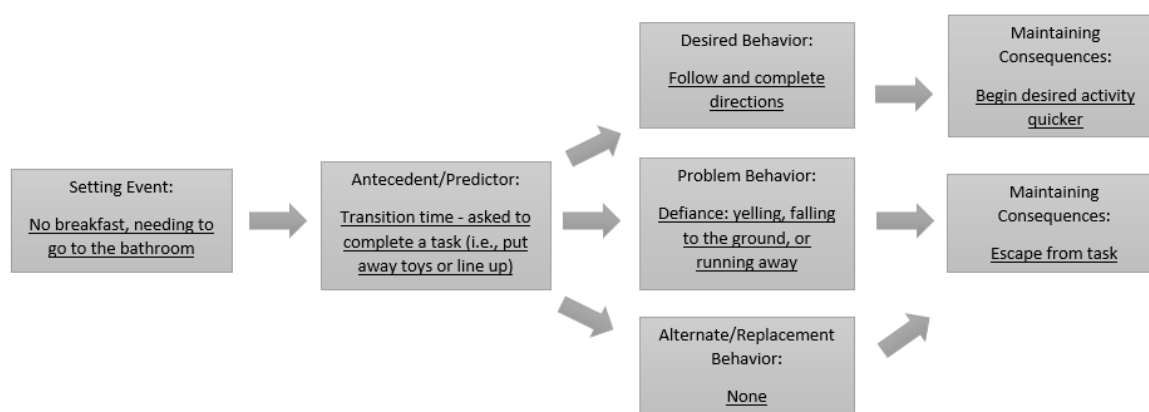
Functional Behavior Assessment (FBA) is a framework to gather information through observations and interviews in school and at home, which is then used to synthesize that data to identify the function and other variables that may be affecting the behavior (Cooper et al., 2020). Within the FBA framework every behavior has a function, which are classified as by one or more of the following terms: attention, access, escape, or self-reinforcing (Cooper et al., 2020). Some examples of identifying a function are as follows: (a) when a student talks out in class and everyone turns to laugh, this student's behavior is reinforced by *attention*; (b) when a child steals a toy from the store, this child's behavior is reinforced by *access* to a preferred item; (c) when a student says a vulgar word in class and gets sent out to the hall, this student's behavior is reinforced by *escaping* classwork and the classroom environment; and (d) when a baby sucks their thumb to soothe themselves, the baby's behavior is maintained by *self-reinforcement*. Identifying and categorizing the function helps us understand how the behavior can be changed and which interventions will be most effective (Gable et al., 2014).

To gather such information, a professional will interview the teacher, parents, and student, as appropriate. These interviews provide information about what behaviors are occurring, what the behaviors look like, when the behaviors happen, and how frequently they occur (O'Neill et al., 2014). A professional will also observe the child in school and other settings of interest. Observations will also provide information on either the frequency, duration,

magnitude, or latency of the target behavior. Upon completing the interviews and observation, data is then synthesized into a “competing behavior” model. Figure 1 is an example of what a competing behavior model would look like, an essential part and summary of an FBA (O’Neill et al., 2014).

Figure 1

Competing Behavior Model



Note. Adapted from O’Neill et al. (2014)

FBAs are an effective tool for managing challenging behavior because research continues to show how vital understanding the function is in creating or choosing interventions that work (Evans & Lester, 2012; Strickland-Cohen & Horner, 2015). FBA identifies the type and source of reinforcement for challenging behaviors and utilizes these findings in designing an intervention that will ultimately decrease the occurrence of those behaviors (Crone et al., 2015). Rather than addressing the child’s behavior directly, an FBA works as a tool to design an effective environment to maximize student success in altering the behavior (O’Neill et al., 2014).

Behavior Intervention Plan

A behavior intervention plan (BIP) uses the data from an FBA to create a consistent plan that can be followed by all those working with the student (Borgmeier et al., 2015; Lloyd & Kennedy, 2014; Martinez et al., 2016; Miller & Lee, 2013). To be effective, there are several components a behavior intervention plan should have. First, a competing behavior model should be created that includes a desired and alternate behavior. This comes from the FBA. Then, the antecedent behavior, consequence of the behavior, and teaching strategies to alter the behavior are developed, along with manipulations to change the setting event or establishing operations (Sugai, Horner, et al., 2000). A plan specifying how, when, where, and by whom the interventions will be implemented is included in the BIP. If the behavior of concern is dangerous to the student or others, a safety plan will also be included (O'Neill et al., 2014). Finally, a plan to collect data confirming faithful implementation of the BIP and measuring student progress is included. Data is to be collected and evaluated regularly to gauge the effectiveness of the BIP (Sugai, Horner, et al., 2000).

If an FBA is completed and a BIP is properly executed, students can succeed in the classroom by learning new replacement behaviors and exhibiting fewer challenging behaviors. This can demonstrably improve the students' quality of life (Lloyd & Kennedy, 2014). The What Works Clearinghouse has reviewed 17 articles on function-based interventions implemented in schools for students with or at-risk for an emotional and/or behavioral disorder, finding that function-based interventions have potentially positive effects for reducing problem behavior and increasing student engagement (What Works Clearinghouse, 2016). Other reviews have concluded similar findings which support the use of function-based interventions for problem behavior (Ingram et al., 2005).

School-Wide Positive Behavior Interventions and Supports

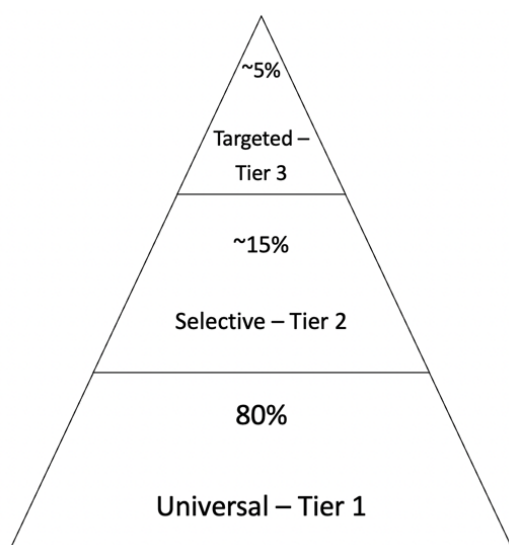
School-Wide Positive Behavior Interventions and Supports (SWPBIS) are an evidenced-based, tiered system of support that aims at preventing problem behavior through a variety of ABA principles, such as teaching skills and appropriate behavior to *all students* in a school while providing reinforcements and positive feedback (Lane et al., 2007; Lewis & Sugai, 1999; Walker et al., 2005). SWPBIS has helped schools shift from a reactive approach involving strong consequent-based components (e.g., detentions, suspensions, expulsion for rule infractions) to a proactive approach containing strong antecedent-based components designed to (a) clarify expectations for faculty members, (b) teach these expectations to all students, (c) afford students opportunities to practice expectations, and (d) reinforce students whose performance meets or exceeds the stated expectations (Lane, Jemma, et al., 2006; Lewis & Sugai, 1999; Shapiro et al., 2002; Sugai, Sprague, et al., 2000). SWPBIS is highly data driven data is collected and reviewed frequently to understand what is working well and what needs to improve. Models such as response to intervention help identify students who would benefit from further support (Fuchs et al., 2004).

Prevention systems can be divided in to three tiers, which are universal, selective, and targeted, see Figure 2 (Sugai & Horner, 2009). The three tiers can transform an aversive school environment to a positive place of learning for each student (Chitiyo & May, 2018). The goal of universal interventions, sometimes called tier-1 interventions, is to target most of the school population (80-90%) to prevent serious problems from starting (Henley et al., 2002; Horner & Sugai, 2000). Examples of tier-1 interventions are positive reinforcement systems, violence prevention, conflict resolution, and social skills curriculums. Selective interventions (or tier 2 interventions) involve self-regulation skills, conflict-resolution skills, study skills, or

supplemental academic supports. Students receiving tier 2 supports will get increased adult support and more intensive instruction or training. Generally, while such interventions would occur in the classroom, they could involve small groups rather than the entire class. Selective interventions typically encompass 15-25% of students (Anderson et al., 2004; Hawken & Horner, 2003). Lastly, for those who need more than the secondary tier can offer, targeted interventions (or tier three interventions) intensely focus on serious problem behaviors. This is typically done on an individual level and is addressed with ideographic, intensive interventions, such as functional assessment-based interventions (such as a behavior intervention plan), mental health support services, and intensive curricular modifications. In a school this would be 1-5 % of students (Lane et al., 1999; Lane, Weisenbach, et al., 2006).

Figure 2

Three Levels of Prevention and Continuum of Behavior Support



Note. Adapted from Sugai and Horner (2008)

More than 25,000 schools across the United States use SWPBIS (Office of Special Education Programs [OSEP] Technical Assistance Center on Positive Behavioral & Interventions and Supports, 2017). When implemented with fidelity, schools reported fewer suspensions, office discipline referrals, and bully among students, while simultaneously reporting improved school climate, emotional regulation, school safety, and academic outcomes (Bradshaw et al., 2010; Bradshaw et al., 2012; Caldarella et al., 2011; Childs et al., 2016). A meta-analysis found that the use of SWPBIS was statistically and educationally significant in increasing positive outcomes for elementary, middle, and high school students (Lee & Gage, 2020). Even in rural school districts, where there is a dearth of behavioral resources, McDaniel and Bloomfield (2020) found that a district successfully implemented SWPBIS through tele-coaching.

Special Education and Special Educators

Special education covers all the disability categories defined in IDEA (2004). These categories include Emotional Disturbance, Intellectual Disability, Specific Learning Disability, Autism, Deaf-Blindness, Deafness, Hearing Impairment, Multiple Disabilities, Orthopedic Impairment, Other Health Impairment, Speech or Language Impairment, Traumatic Brain Injury, and Visual Impairment, including Blindness (IDEA, 2004). Because the range of disabilities is broad, classrooms may be divided by similar disabilities or be heterogeneous across disabilities. There may even be schools that specialize in certain disabilities (Gargiulo & Metcalf, 2016). Most commonly settings are distinguished between settings for individuals with high-incidence disabilities and those with low-incidence disabilities (Gargiulo & Metcalf, 2016). IDEA provides examples of how different service delivery models can look. Per IDEA, to determine what setting a student is placed in is determined by identifying the setting that is the least restrictive to

the student (IDEA, section 614). Special education teachers are typically certified to teach grades K to 12. Initial licensure requirements can vary in order to meet the unique and diverse needs of students (Blanton et al., 2017). However, certification is becoming more comprehensive since the year 2000, meaning it is steering away from categorical licensure, becoming more broad than narrow (Sindelar et al., 2019).

High Incidence Disabilities

Students with high incidence disabilities make up 80% of all students receiving special education (Gargiulo & Metcalf, 2016). It includes the classification of: Emotional Disturbance, Intellectual Disability, Specific Learning Disability and Autism (Gage et al., 2012). These students most often take part in the same general education curriculum as the majority of the student body for most of the day (Gargiulo & Metcalf, 2016). Some districts take a more inclusive approach such as co-teaching, where the special educator goes into the general education classroom to teach (Scruggs et al., 2007). Another inclusive model involves the special educator teaching small group instruction lessons within the general education classroom, known as a “push-in model” (Mitchell, 2015). Other approaches are more exclusive, such as a pull-out model where students leave the general education classroom and spend their time in the resource room with the special education teacher (Gargiulo & Metcalf, 2016).

Low Incidence Disabilities

Low Incidence disabilities make up 20% and includes Deaf-Blindness, Deafness, Hearing Impairment, Multiple Disabilities, Orthopedic Impairment, Other Health Impairment, Speech or Language Impairment, Traumatic Brain Injury, and Visual Impairment (Friend & Bursuck, 2019). Students with severe disabilities need highly specialized behavioral and academic support (Gargiulo & Metcalf, 2016). Yet, within special education settings for students with severe

disabilities, there is still much variance. Self-contained classrooms are where teachers have a small group of students, typically with learning or behavior needs that require individual, intensive support and interventions all day (Bettini et al., 2019; Rozalski et al., 2010). Other settings may be outside the regular education environment when the severity of the disability requires such as a school for solely for those with more intensive needs (Gargiulo & Metcalf, 2016). Finally, special education teachers may serve as itinerant teachers who serve students in multiple schools (Luckner & Howell, 2002).

Early Childhood

Early Childhood Special Education is a combination of two fields: early childhood education and special education (Safford et al., 1994; Wolery & Bredekamp, 1994). It provides services to all children with disabilities between 3 and 5 years of age (Wolery & Bailey, 2002). In order to benefit, a child must be diagnosed early; however, this can be a problem in areas lacking resources and education about early recognition of disabilities (Wolery & Bailey, 2002). Early Childhood Special Education involves individually tailored educational programs and is very family centered. It focuses on precursor skills, such as communication and social skills that are needed to be successful in school (Odom & Wolery, 2003). Behavior supports are also important in these settings to ensure student success in later years (Stormont et al., 2005).

There are many different service delivery models for early childhood special education. Service delivery models have various dimensions. They vary on location, activities, collaboration with other programs, philosophical model, and focus of service. Services may be home, clinic, or center based. Activities may include direct service, therapy, or consultation. They may be family-focused, child-focused, direct teaching, or play based. Other dimensions that may vary

include the degree of collaboration with other programs, the philosophical model, and amount of services provided (Wolery & Bailey, 2002).

Special Education Teachers Challenges

Special education teachers face many challenges as is evident in the amount of teacher shortages and persistent attrition rates (Billingsley & Bettini, 2019). In fact, the literature states that each year 13% of special education teachers leave the profession (McLeskey et al., 2004). Nationwide the U.S. Department of Education and Office of Postsecondary Education found that 46 states were drastically short of special education teachers (Robinson et al., 2019). One explanation to teachers shortages is teacher burnout (Billingsley, 2004; Hagaman & Casey, 2018).

While the literature states various reasons for special education teacher burnout, the reason relevant to this study is that of managing challenging student behavior (Hastings & Brown, 2002). In fact, Martin says that students' challenging behavior is a major teacher stressor and when teachers are stressed, they are less likely to address the behavior effectively leading to more stress (Martin et al., 2012; Oliver & Reschly, 2007). White and Mason (2006) found when surveying 147 special educators across seven different states in the U.S., 60% needed assistance with behavior management during their first-year teaching. Similarly, multiple studies have consistently found that even teachers who have graduated from top-rated universities with relatively extensive training in classroom management are still concerned and desire more training in behavior (Nahal, 2010; Stough et al., 2015; Whitney et al., 2002). The literature suggests that special education teachers across all settings and age groups struggle with challenging behavior. Early childhood teachers report that the greatest challenge they face is disruptive behavior (Arnold et al., 1998). Similarly, in a survey of teachers of students with

mild/moderate disabilities found that through exposure to challenging behaviors is associated with their own personal well-being regarding emotional exhaustion and lacking a feeling of personal accomplishment (Hastings & Brown, 2002). In settings with students with severe disabilities, teachers often feel isolated and have a lack of professional collaboration which makes it difficult to provide for the diverse needs of their students with challenging behavior (Crane & Iwanicki, 1986; Kaff, 2004; Miller et al., 1999; Zabel et al., 1984). While the effects of challenging behavior on teachers has no bounds on across disabilities, it is interesting to note that one study also found higher teacher burnout rates in settings with more students with behavior needs (Nichols & Sosnowsky, 2002).

Board Certified Behavior Analyst Challenges

From the literature analyzed for this review, there appeared to be a dearth of literature on how BCBAs effectively work with and in schools. The available literature shows the difficulties BCBAs face when working in a school. For example, one study states that school-based BCBAs may be perceived as inflexible or uncooperative due to their duty to adhere to the BACB's compliance code (Menendez et al., 2017). In a web-based survey of 106 BCBAs across the U.S. (63 of which were school-based), 77% reported receiving pressure from supervisors to not recommend services because of associated costs (Brown, 2021). Of course, this is a serious breach of their ethical code. VanDerwall and Poling (2021) state that school based BCBAs may lack specific training in the roles and activities of other school professionals, as well as with the structure, function, and mandates of schools. Accordingly, they recommend that BCBAs continue to develop knowledge, skills following graduation to aid in these areas, as prompted by the BACB (Behavior Analyst Certification Board, 2014).

Of course, it requires behavioral knowledge about ABA to complete accurate FBAs (Borgmeier et al., 2015; Young et al., 2018). Not surprisingly, teachers with a knowledge of ABA techniques are better able to alter challenging behavior (Young & Martinez, 2016). One thesis found that special education teachers in America perceived their knowledge of ABA as being significantly higher than their actual application of behavior analytic practices (Reeves, 2017)

Since there is a scarcity of BCBAs in schools, it is important that BCBAs maximize and effectively use their time while working with teachers. In order to understand how to foster a collaboration between the BCBA and teacher, it is important to understand how a teacher views a BCBA. Findings from this study will fill a void in the literature to help us understand the teacher's perception of a much-needed support that can protect them from burnout and improve their students' success.

Need for Collaboration

Teachers need behavior support and help. According to Bethune and Wood, "due to the difficulty in implementing FBAs and function-based interventions, teachers may need additional support through other training and support methods" (2013, p. 98). A district can educate teachers on classroom management through professional development (Oliver & Reschly, 2007; Wilkinson et al., 2020). Another reason special educators have left the field is because of the lack of support, particular in behavior support (Gebbie et al., 2012). "Ensuring educators have the skill set to manage their classroom and the behaviors students experience is essential because ineffective classroom management practices are associated with negative outcomes for students and teachers alike." (Reinke et al., 2013, p. 39).

Consistent collaboration between BCBA and special education teachers could be a solution. This confluence of BCBA and special education teachers is untreaded territory. Only one study has sought to address this relationship between a BCBA and teacher (general and special education (Drumb, 2018). In Drumb's qualitative study there was a sample size of eight teachers. The teachers included those working in special education and general education. The main findings were: (a) participants stated that they desire more support, time and training from the BCBA; (b) each participant reported that a weekly meeting with the BCBA was beneficial to them; (c) participants felt that the BCBA is an objective resource that is knowledgeable about behavior (2018).

A collaboration between educators and BCBA, professionals specifically trained in behavior analysis, could fill this gap and be beneficial to students and educators (Drumb, 2018). Examples of benefits include less instruction time lost (Briere et al., 2015), less stress, and burnout felt by the teacher (Aloe et al., 2014).

CHAPTER 3

Methods

This section details the research design for this thesis study. The research design, participants, setting, procedures, data analysis and trustworthiness will be discussed. A qualitative approach was selected to capture the complex and robustness of the lived experiences of the participants and explore their interactions with BCBA's in depth. Ethical practices were followed; prior to data collection permission was received by the researcher's university Institutional Review Board (IRB). Consent and IRB approval forms are in Appendix B.

Research Design

The researcher used a Multiperspectival Interpretative Phenomenological Analysis (IPA) with focus groups (Larkin et al., 2019). The purpose for a Multiperspectival IPA focus groups is to make sense of individuals' experiences using ideographical, phenomenological, and hermeneutic practices (Smith et al., 2009). In IPA methodology, no formal hypothesis is formed until after the data collection. This aids the researcher in uncovering the proverbial iceberg of the participants' lived experiences, generally in a homogeneous group who have some lived experience in common (Reid et al., 2005). A Multi Perspectival IPA focus group design is unique in that data is collected from each homogenous group and then analyzed not only within that group but between other groups. This extends the analysis by combining the lived experience and perspectives of the participants in each focus group (Larkin et al., 2019).

Focus groups will be used because they are a socially oriented research procedure. Focus groups allow for group interaction which creates a comfortable atmosphere wherein honesty and sincerity are inspired. This creates a safe space in which can participants to express their ideas, and agreement or disagreement with others' ideas. The social aspect of focus group discussions

helps spark memories or experiences that participants may not consider mentioning had they been interviewed individually. Focus groups were held via Zoom. There are unique affordances to using Zoom, a couple being: participants feel more open to sharing personal issues on stigmatized topics and both interviewer and interviews are more comfortable and relaxed in their own homes (Gray et al., 2020; Wahl-Jorgensen, 2021). Thus, using a Multi Perspectival IPA focus group design via Zoom in this study is an effective way to explore the ways special education teachers think about working with a BCBAs in schools.

Participants

A vital part of Multi Perspectival IPA methodology is that the participants are the experts in the phenomenon of interest (Smith, 2011). Due to the phenomenon of interest being special education teachers' experiences relative to interacting and working with BCBAs in their schools and districts, participants will be special education teachers and administrators who have had interactions with BCBAs in their school settings. Participants were recruited from five school districts. To recruit participants, district special education directors were contacted and emails with information about the study and qualifications were sent to all special education teachers. A record was kept of participants who were and were not included in the study as well as reasons for why they are excluded. Participants were delivered a treat of their choice as compensation for their time.

In accordance with Multi Perspectival IPA, the special education focus groups included participants in homogenous settings, i.e., mild/moderate disabilities, severe disabilities, early childhood special education, and administration (Larkin et al., 2019). All participants resided within the intermountain Western state where the study was conducted. Demographic information of participants is summarized in Table 2.

Table 2*Demographic Information for Participants*

Characteristics	
Gender	
Male	1
Female	19
Years spent teaching	
0-5	5
6 to 10	8
11 to 15	1
15 to 20	4
20 or more	2
Education	
Bachelors	8
Masters	11
Ph.D. or higher	1
Certificates	
Special education	15
General education	6
Early Childhood Special Education	3

Note. A few of the teachers had certificates in more than one area.

Setting

Focus groups were set-up with teachers from similar backgrounds. There were 5 focus groups held and one pilot study focus group, see Figure 3 and Table 3. The data from the pilot study was included in the findings. The participants were divided into groups of special education teachers working in settings for students with mild/moderate disabilities, special education teachers working in settings for students with severe disabilities, special education teachers working in early childhood settings, and special education administrators. Due to scheduling conflicts, there were two groups of administrators. In the data analysis they are considered as one group since they shared the same setting.

Figure 3

Virtual Focus Groups

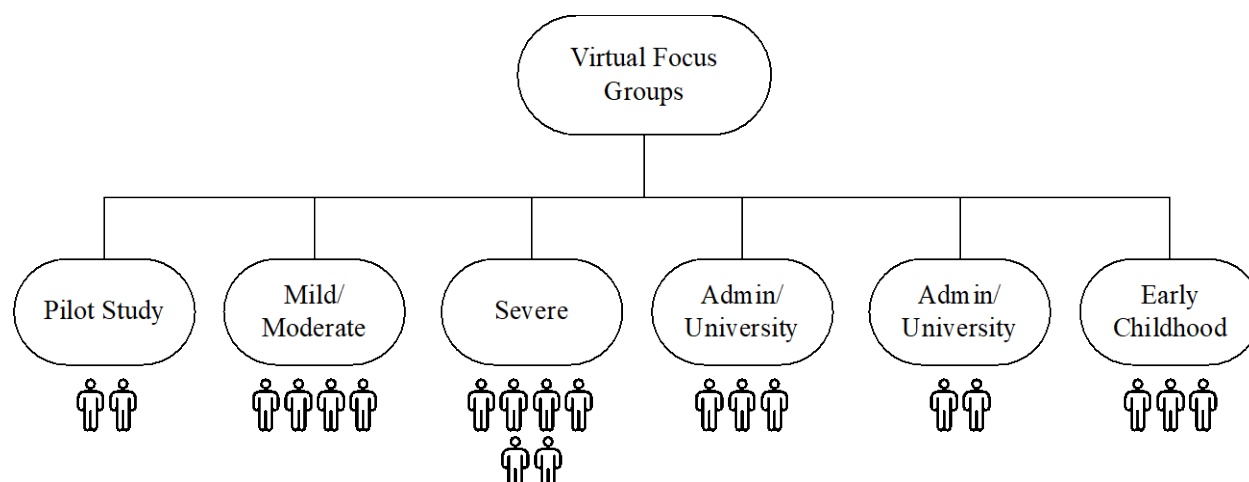


Table 3*Participants Demographic Information per Focus Group*

Characteristics	FG 1: Mild/ Moderate	FG 2: Severe	FG 3&4: Admin and University	FG 5: Early Childhood	Pilot Study
Gender					
Male	0	1	0	0	0
Female	4	5	6	3	2
Years spent teaching					
0-5	1	1	0	1	2
6 to 10	2	3	2	1	0
11 to 15	0	0	1	0	0
15 to 20	1	2	0	1	0
20 or more	0	0	2	0	0
Education					
Bachelors	1	4	0	1	2
Masters	3	2	4	2	0
Ph.D. or higher	0	0	1	0	0
Certificates					
Special education	4	6	4	0	1
General education	1	0	1	1	0
Early Childhood Special Educator	0	0	0	2	1

Note. FG = Focus Group.

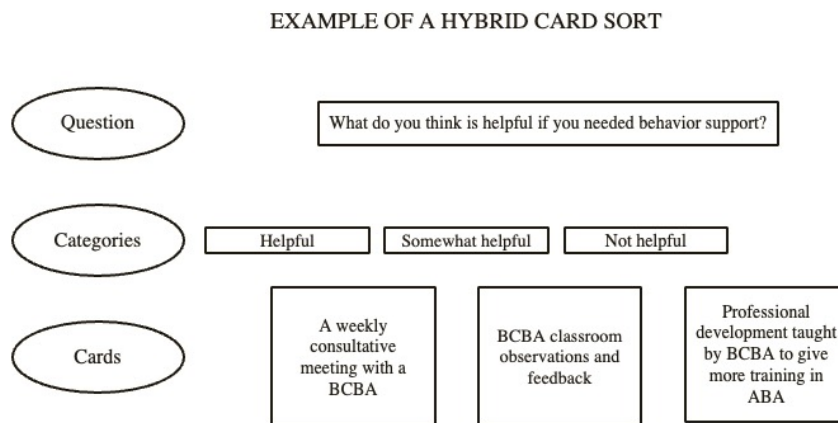
Each group had a facilitator and a note taker. The same interview protocol was used for each focus group to ensure that the groups were held within the same conditions including the same questions, materials, and time frame. Each focus group lasted one hour. Prior to joining the video call, all participants were consented. At the beginning of the video call participants were given information regarding the purpose of the study, confidentiality, their ability to withdraw at any time, and other relevant information.

Halfway through the focus group participants were given a link to a google Jamboard and given instructions on how to do the card sort. The facilitator was trained to create a thoughtful, safe, open, atmosphere and to ask pre-determined questions. The note taker observed and reported body language throughout the focus group session. Focus groups were recorded by audio and video. Participants were instructed to say their name before any statements to help with the transcription process.

As noted above, facilitators were given an interview protocol script to use during the administration of the focus group (see Appendix A). This script included tasks, questions, and example follow up questions. At the end of the focus groups, participants were given the opportunity to share anything that had not been discussed that they wanted to share.

Focus Group Procedures

A hybrid card sort was created using current literature about BCBAs in schools (Drumb, 2018). The use of the cards was not evaluated. Rather, the cards served as a conduit to open and deepen conversations about this under researched topic. The cards allowed for participants' flexibility in their responses by allowing personal interpretations. Participants had an option to add their own card or place a disagree card over any of the cards. Figure 4 below is an example of what a question would look like followed by categories and the cards to be sorted. Participants are encouraged to discuss each item as much as possible.

Figure 4*Example of a Hybrid Card Sort***Data Analysis**

The researcher used Multi Perspectival IPA methodology to analyze the data (Smith, 2011). Analyzing data in Multi Perspectival IPA methodology is a rigorous multi-stage process. Each stage will be discussed below (Smith, 2019).

As explained by Alase (2017), the IPA data coding was traditionally conducted through cycles. In the first cycle, the researcher read and reread the transcripts multiple times. As the transcripts were read and reread the researcher added codes to individual quotations or parts of a quotation. The codes were generally few word phrases such as "Helpful when BCBA has school background" or "BCBAs are 'Fresh Eyes.'" The researcher repeated the initial round of coding twice and upon finishing it for the second time concluded with 65 meaningful codes from the transcripts.

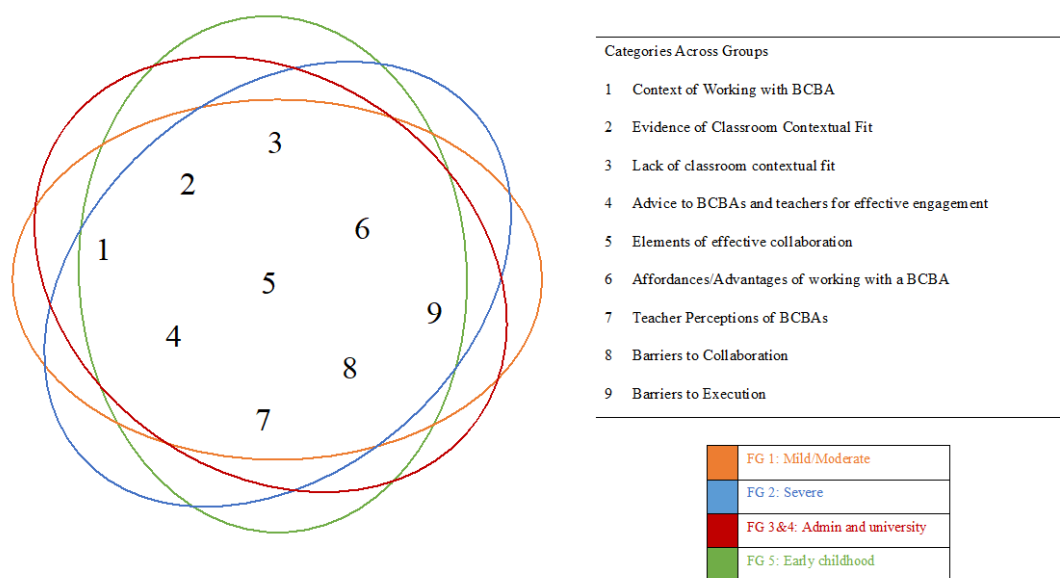
The next cycle of coding helped researchers get closer to the "core essence" of the participants' lived experiences (Alase, 2017). During this cycle of coding the codes from the

initial round were listed, moved around and categorized to eventually produce eight meaningful categories. The final categories were identified as context of working with a BCBA, evidence of contextual fit, lack of contextual fit, advice to BCBAs and teachers for effective engagement, elements of effective collaboration, affordances/advantages of working with a BCBA, teacher perceptions of BCBAs, barriers to collaboration, and barriers to execution. Two members of the research team performed this step independently and results were then shared, and ideas merged to create the cohesive categories.

Next, categories were organized into four concise themes. The themes being: (a) context of working with a BCBA; (b) contextual fit of interventions; (c) elements that strengthen the relationship between teachers and BCBA; (d) barriers to effective relationships between teachers and BCBA.

In alignment with IPA data analysis, within this stage, a synoptic code table was created. This table highlighted a few quotations from each theme to further illustrate the data in a concise way. Creating the table also preserved the strength and integrity of the quotations.

Figure 5 is a visual representation of the categories across groups. It is a complex way to simply show that every category was found in every focus group. This finding was very unexpected because it shows that experiences are similar across the different groups of special education teachers, when generally these types of visuals show nuances and differences between groups.

Figure 5*Categories Across Groups***Trustworthiness**

Within qualitative research, high standards of rigor are maintained to ensure credibility and trustworthiness in data collection and interpretation (Brantlinger et al., 2005). Standards of dependability, credibility, transferability, and confirmability techniques were suggested by Lincoln and Guba (1985) including peer debriefing to guarantee trustworthiness. Reflexivity is an important aspect of IPA to recognize the effect the researcher may have on the participants during data collection. It also gives a chance to highlight any biases the researchers may have during the entire study. Researchers met collectively and individually to talk about and record in writing their experiences throughout the analysis and interpretation processes of this study.

These standards were followed by performing the following procedures during the data analysis process: investigator triangulation, peer debriefing, member checking, expert checking, and reflexive journaling.

Investigator Triangulation

Investigator triangulation strategies help researchers reduce fundamental biases by including multiple locations, researchers, and data collection methods (Noble & Heale, 2019). Some of the transcripts from the interviews, reflections, and observations were analyzed separately and then compared to see if findings aligned. Any deviations were discussed and agreed upon.

Peer Debriefing

Peer debriefing allowed the research team to explore different ideas, check for bias, and experience cathartic release during data collection and data review. Peers were emailed the 65 codes and asked to categorize them into themes.

Member Checking

Interview transcripts were emailed to participants for member checking. They were asked to read the transcript to ensure it correctly captured their voice and experiences in the way that was intended. Follow up questions were also asked based from preliminary findings. Four participants responded back to member checking. All four approved the transcripts. All four expanded their answers and wrote more about trust relative to experiences with BCBAs, feeling vulnerable when working with BCBAs, and preconceived opinions they had formed prior to working with BCBAs. These data were added to transcripts and considered part of the broad data analysis.

Expert Checking

There were two expert reviewers. Reviewer one was a female, a classroom teacher for 17 years in a severe special education setting and a district based BCBA for 5 years. Reviewer 2 was a male university professor BCBA-D who works with master's students and supervises BCBA candidates that are getting their hours in schools. After the analysis was complete, they were sent the data to review and specifically look at or comment on: (a) the plausibility of the findings (b) the implications these findings have to the field (c) findings or lack of findings that are surprising. The synoptic code table along with a form was sent. They were asked to look at the findings and then report their own thoughts and feedback on whether they felt findings were (not) aligned with their own experiences as experts in the field.

Both reviewers agreed that the findings were plausible. Specific comments provided by reviewers will be reported in the findings. Comments that did not align with our findings will be reported in implications for future research. Reviewers also added implications for practice that will be discussed there.

Reflexivity Journal

To ensure dependability and confirmability, a record was kept of training, process, and decisions which could be used to audit the findings of the research. The researcher wrote reflexive notes and used reflexive journaling. Reflexive tools allowed researchers to express and disclose their positionality. After each focus group the researcher wrote thoughts about it. Quotations from journaling will be included in the findings.

Statement of Positionality

In my work with special education teachers, I listened and learned about their perceptions and experiences in working with BCBAs. Being a special education teacher and having had

experiences with BCBA's, there were comments that resonated with me and others that did not. I realized that participants may have felt more open to talk to me about their experience because of our shared profession.

The reflexive journaling introduced below helped me to work through biases. For example, although I am a special educator, I have been a special education master's student in a program that contains the BCBA coursework throughout the course of the study. Therefore, I brought my experiences with BCBAs as a special educator and then throughout my graduate coursework I encountered new content and ideas about BCBAs. I often wrote in my reflexive journal after classes when things were discussed that related to my study and discussed these ideas with my study chair. This happened the most while taking a BCBA ethics course. When I would look back through my data, I would start to see these experiences more from the side of the BCBA than the teachers. In a memo written before taking the ethics class, I expressed sympathy for BCBAs in schools. I felt that they needed more support and are often misunderstood despite the good they bring to the table. Then after taking the ethics class in December, I wrote that I was feeling that BCBAs should not even try to be in schools; it's just too messy. This working through of my disparate thoughts helped me to understand better the nuances and complexities of special education teachers and BCBAs working together.

CHAPTER 4

Findings

This study explored teachers' perceptions of previous experiences and interactions with BCBAs in a school setting. The goal of this study was to better understand how special education teachers view and utilize BCBAs. In harmony with this study's goal, the research question was: how do special education teachers think about BCBAs? See Appendix B for interview protocol.

Data analysis included many rounds of coding which incorporated expert and member reviews along with the researcher's reflexive journaling. In analyzing the data, four themes emerged: (a) background relationship with the BCBA; (b) contextual fit of BCBA interventions; (c) elements that strengthen the relationship between special education teacher and BCBA; and (d) barriers to effective relationships between teacher and BCBA. The names of the themes and categories were revised to better reflect special education language based on feedback from expert reviewer one. A summary of the categories within each theme is shown in Table 4.

Table 4

Summary of Themes and Categories

Themes	Categories
Background relationship with BCBA	Context of working with BCBA
Contextual fit of interventions	Evidence of classroom contextual fit Lack of classroom contextual fit
Elements that strengthen the relationship between teachers and BCBA	Advice to BCBAs and teachers for effective engagement Elements of effective collaboration Affordances/advantages of working with a BCBA
Barriers to effective relationships between teachers and BCBA	Teacher perceptions of BCBAs Barriers to collaboration Barriers to execution

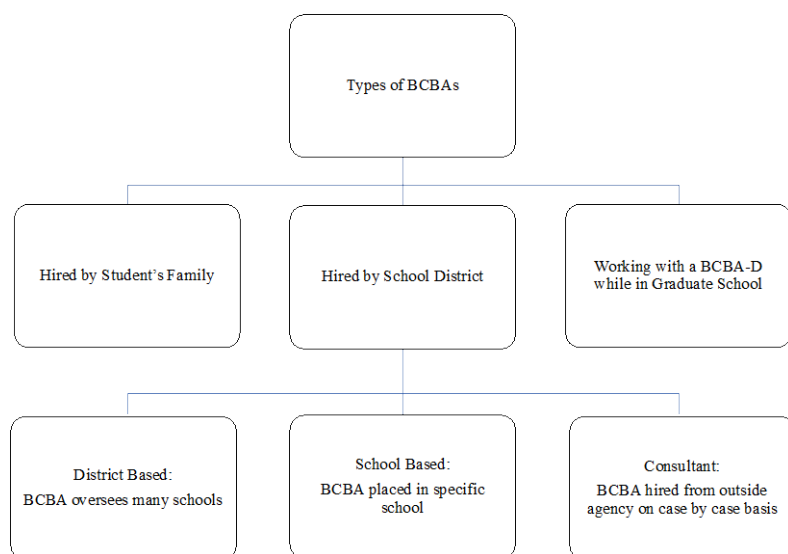
Note. BCBA = Board Certified Behavior Analyst.

Theme 1: Background Relationship With the Behavior Analyst

The first theme covered one category, the background relationship and context the participants had when working with a BCBA. Each focus group began by asking participants, “In what ways have you interacted with a BCBA?” This question laid the foundation for understanding the context of the participants history, interactions, and experiences with a BCBA. Throughout the rest of the themes these contexts will be referenced in an effort to provide more meaning and explanation to the experience. There were five different types of BCBAs mentioned during the focus groups, visually organized in Figure 6. The first being BCBAs hired by a school district. Within that context were three different roles of BCBAs: (a) those assigned to help the entire district or specific school’s (district BCBA); (b) those assigned to a specific school full-time (school based BCBA) and (c) those hired for a specific behavior case (consultant). The latter two types are BCBAs hired by a students’ family and a BCBA teaching graduate courses.

Figure 6

Types of Board Certified Behavior Analysts



Note. BCBA = Board Certified Behavior Analyst

Most frequently brought up in each focus group were BCBAs hired by the school district. The following quote describes the context of working with a school based BCBA:

I work with a BCBA daily because I work in a behavior unit, and so we are constantly teaming up together to go over behavior plans, behavior strategies, also with professional development. She holds professional development for us, but it's a daily thing. [1.3]

Other participants also noted that there was more daily interaction and support with school based BCBAs. Notably, within the context of school based BCBAs, three of the focus groups participants mentioned their experiences were with someone who was still completing supervision hours to become a BCBA but had already assumed the title of BCBA. The following quotation is from a participant describing their experience in working with a school-based team lead who was still completing their BCBA supervision hours.

We had; he was a BCBA [participant used hand quotes as she said BCBA] but he was not licensed. He called himself the BCBA at the school for about a year and a half. That was not the most positive experience unfortunately. But he called himself the BCBA when he was supposed to be the team leader. [2.3]

Context proved to be an important variable throughout each of the interviews and shared experiences. Expert reviewer 2 agreed with the importance of the context on informing the interaction. They said that the negativity some participants expressed was not surprising if it was a BCBA consultant hired from outside the district, but that it was surprising if they were working in the district. The following sections will refer to the context of working with the BCBA and show how that affected the situation. In general, the closer and more involved a BCBA was in the school, the better the contextual fit of their behavior plans and advice. Thus, BCBA's embedded in the school could better develop relationship of trust and help than the BCBA's who

were from outside the district. Because external BCBA's generally lacked understanding of specific system nuances, and had only limited time to build trust, they were generally associated with worse experiences for teachers.

Theme 2: Contextual Fit of Interventions

Contextual fit is a means to measure interventions. It is defined as a match between what is being asked to be implemented (e.g., behavior plan or class strategies) and the values, skills, resources and abilities of those implementing and receiving the intervention (Benazzi et al., 2006). This theme was comprised of two categories: evidence of classroom contextual fit and lack of classroom contextual fit. Through the experiences shared it was evident that while some BCBAs gave teachers behavior plans which were considered a contextual fit, others did not. Experience of both good and poor contextual fits were present and discussed in all focus groups.

Evidence of Classroom Contextual Fit

Evidence of classroom contextual fit was mentioned in each focus group but there was few examples or details. Contextual fit experiences were reported in focus groups where the evidence involved having a school based BCBA. For example, Participant 2.1, who works with a school based BCBA, explained the advantages that come from having a familiarity of the classroom environment. “Our in-house BCBA comes in and models the interventions in the classroom. He can see how it fits within the systems of your classroom and I find that to be far more helpful and useful” [2.1]. To plan an intervention that works congruently within the systems of a specific classroom means that the teachers’ values and resources were taken into consideration when developing a behavior plan. When the plan or ideas seemed compatible with what was already happening in their classroom, the teachers found it more feasible to implement.

Without classroom experience, understanding what it is like to be a teacher is difficult. A BCBA's without prior school experience or context will find it difficult to understand what is meant by the "systems of your classroom." For this reason, one of the participants mentioned that their school district only hires BCBAs that have an active teaching license. This anecdote speaks to how much the school district values a BCBA with a school background because their knowledge of a classroom's contextual fit will help them to be more effective when working with teachers [3.1].

One participant shared a frustrating experience in which contextual fit was blatantly missing, and then explained what their ideal meeting with a BCBA would look like.

[A] meeting of the minds where the classroom teacher is the expert of the classroom, knows the vibe and flow and knows what the community feels like and what the community as a whole needs and the person coming in [the BCBA] with a new perspective, not a daily perspective, an individualistic perspective with hopefully new ideas of how to implement things to help support that one student so that the learning community can get back to a place where everyone can access teacher attention academically and social-emotionally and can access each other as peers. [1.1]

Having a BCBA come into a classroom and understand all the moving parts was important to many participants. Understanding the "vibe," "flow," and "community" is critical for establishing a contextual fit that aligns with the values, skills, resources, and abilities of teachers and special education paraprofessionals implementing and receiving the interventions.

Lack of Classroom Contextual Fit

Lack of classroom contextual fit was discussed much more than evidence of contextual fit. The following quotation represents an experience in which there was a mismatch between

what the BCBA was asking the teacher to implement and the resources and values the teacher had.

I've got, you know, 35 students that I'm working really well with....and when things came back, it felt like I had to change my room. I feel like I'm a Disneyland parent. They want me to put in all [these] rewards and now I've got another student who's really acting up and I'm like, "Am I going to have to do this for every student?" [1.2]

Comparing themselves to a Disneyland parent meant this participant felt like the BCBAs indulge their students with too many rewards instead of discipline. Clearly, there was a mismatch between what the teacher was being asked to do and the resources the teacher had available. Other participants across focus groups mentioned that they thought the BCBA's behavior plan was valuable but unrealistic to implement in a school setting where resources are spread so thin. Participants expressed that they try to implement the recommended plans but because they lacked resources the plans were often implemented with low fidelity. This is important because when plans are not implemented with fidelity, it compromises the integrity of the plan. As noted by a participant, "Oftentimes that's what we see: a great behavior plan written, but it's not implemented with fidelity at all. Not because the teacher doesn't want to, but because there's so much to do" [2.4].

Participants frequently noted that when working with a 'consultant' BCBA, interventions or ideas were more likely to disrupt the flow of the classroom. However, participants agreed that the 'consultant' BCBAs interventions were good for working with a student one-on-one. I felt like I wasn't being heard in that, and I think part of that was, BCBAs have this really beautiful sort of call to action for the individual, but they don't necessarily have the mind of the community, and that is great if you come with new ideas for me to implement, but it's frustrating

if you're not hearing me say this isn't working for this child and it's not working for this community. [1.1]

In summary, the consistent theme of contextual fit encompassed the examples and experiences discussed in each focus group about its importance. The BCBA's help is limited unless they understand how a specific classroom works, the values of the teacher, and the resources and capability they possess. Otherwise, their behavioral plans will not be implemented with fidelity and teachers will more likely feel overwhelmed. Having a match between the plan the teacher is asked to implement, and the values, skills, resources, and abilities of those implementing and receiving the intervention, is a key factor for BCBAs to consider.

Theme 3: Elements to Strengthen Relationships Between Teachers and Behavior Analysts

This theme is comprised of 3 categories: (a) advice to teachers or BCBAs for effective engagement; (b) elements of effective collaboration; and (c) affordances of working with a BCBA. These categories were structured chronologically to build on each other. First, there are fundamental agreements for the teacher and BCBA that need to be understood when beginning a relationship. Next, principles of collaboration must be followed by both sides for effective engagement. Finally, the teacher must execute the plan and maintain a positive relationship with the BCBA.

Advice to Behavior Analysts and Teachers for Effective Engagement

Teachers commonly noted that they had a background in basic behavior principles from their schooling. They felt that BCBA were sometimes condescending when they assumed the teacher knew nothing about behavior. This was discussed in each of the teacher focus groups (mild/moderate, severe, and early childhood) One participant expressed their feelings this way after receiving an observation from a BCBA, "...teaching me classic behavior principles that I

already knew, but they didn't ask if I knew them, they were just assuming that I didn't know them or how to do them based on their hour-long observation in my classroom” [2.1].

On the other hand, in the special education administrators’ focus group, they observed that special education teachers needed more training in basic behavior principles. They noted this was also true for general education teachers and administrators as well. They explained that the more behavioral knowledge they have, the more performance improves:

I think that if everyone has better instruction on basic behavior principles everyone does better. You can make better decisions; you can create better systems in your classrooms, and this goes for both general education and special education teachers and administrators. I wish that BCBAs were part of the entire school team because I think when people know better, they do better, and so, if people know more about basic behavioral principles, it sets everybody up for better experiences. [3.3]

Another reason brought up in the special education administrators’ focus group was the belief that if general education teachers had more training in behavior from a BCBA, the fewer students would end up in special education. Additionally, they felt special education students would do better in the general education environment. Having a BCBA train general education teachers would preempt problem behaviors by setting the environment up for success:

What would happen is that if a general education teacher did have [a student with] challenging behaviors? They would go straight to the office, or they get referred to Special Education. I think it would have been so beneficial if there was someone teaching the whole school, that there was a school-wide team that had access to a BCBA before we have really dangerous or challenging behavior. [3.3]

Also important was the need for BCBA's to build relationships with school personnel before stepping in to address a challenging behavior. Introducing themselves and providing some training would help the school's staff feel more comfortable with the BCBA and would help the BCBA avoid becoming a "behavioral EMT," meaning the BCBA is only called during a behavior crisis and expected to improve the situation:

If BCBA's could introduce themselves to the district they could say, "We are your people. We want to help you. We want to answer questions. We don't just want to run out with a siren on our car when somebody is in massive trouble, but we want to get ahead of things, we're all a team." That would be something I would love to see happen, to have our behavior experts be part of things in building those relationships before it's an emergency. [3.1]

Another expectation teachers had was that it was the BCBA's responsibility to collect fidelity data for intervention plans. Participant 1.1 told of a stressful situation where things were not improving after they unsuccessfully tried to implement the BCBA's behavior plan. The BCBA told her, "Well, if it's not working then you must not be following it." Obviously, that was frustrating for the teacher to hear because she believed she was following it. The participant added:

I think that if a BCBA is going to write a BIP for an individual student and expect you as the teacher to follow that with fidelity, they have a responsibility to come in and do a fidelity check to make sure that you are following the BIP, and so, when you say, "Hey this isn't working," they're like, "You know what? We saw that you're doing it to fidelity, so let's together figure something else out and provide something real and helpful." [1.1]

Participants agreed that a BCBA taking fidelity data is helpful. Participants noted that they lack the time and resources to gather such data and that doing so should be the responsibility of the BCBA.

Multiple teachers supported each other on the stance that a BCBA should not be observing them teaching. Some expressed their belief that teaching is outside a BCBA's field or that feedback on instruction is the principal's job. For example, a participant expressed the concern that "I don't feel like that's the job...to tell someone how to teach" [P1]. Likewise, another teacher opined: "They're there for behavioral interventions and not [for critiquing] your instruction" [P2]. These quotes are illustrative examples of teachers acting "professionally territorial" and manifests a lack of understanding of how addressing behavioral issues may overlap into giving instruction.

However, some teachers were more open to their feedback and found feedback from BCBAs on their instruction to be helpful. Participant 5.1 said, "Helping gain new functional skills as opposed to just handling behavior, that's a great way to utilize that BCBA; to help us learn to teach better." Regardless of whether a BCBA should critique a teacher's methods, all participants shared that they felt uncomfortable experience being observed by a nonteacher, especially if there is a preconceived notion that the BCBA will give harsh feedback [5.1].

In the early childhood focus group, a participant turned the conversation to their own growth mindset to help with the feelings of inadequacy when being observed, "I feel like as teachers we teach growth mindset, but we don't practice it. So, maybe we need to work on our own growth mindset that mistakes are made and that we can recover and learn from those things" [5.3].

Some participants even gave advice to other teachers in dealing with being observed and receiving feedback from a BCBA. A couple of the focus groups discussed not taking a student's challenging behavior personally and learning to separate oneself from it, as most CBAs do when they come observe:

Sometimes we might, we don't intend to, but we take behaviors personally. When a BCBA comes in, they can be more objective. It's not that extra vision but it's also the ability to disconnect from what's happening and not internalize it and take it personally... [3.1]

Lastly, teachers offered the following advice in their focus groups: teachers need to communicate to CBAs when they are feeling overwhelmed. If teachers are reaching out, it is because they have exhausted their personal toolbox and knowledge base, not that they lack any knowledge base. Participants expressed that they should ask a BCBA for help when their basic knowledge is insufficient for a given behavior situation and they need an expert to come help.

We were trying so hard and working on all cylinders. [This student] came to me last year ... the BIP was for him all ready. My aid [sic] had things in place for him already. His desk was like a little command center. We had a break schedule, we had a token economy, he had extra break cards he could use. We had all these different tools that we have been told by the actual formal and legally binding documents, but also from his previous teachers. You could just tell things were just getting tougher and tougher for him; his behavior was deteriorating. You could tell he was just feeling overwhelmed, and I finally was just like we need to call an audible on this. We need some help, and we had the BCBA come in. [1.1]

In sum, this category highlighted helpful advice from teachers to BCBAs. Participants want BCBAs to understand that special education teachers do have a background in the basics of behavioral science. Participants feel that it is important for BCBAs to build relationships with the whole school and provide trainings to all teachers and staff to preempt problem behavior. Some participants also expressed a desire for assistance in collecting fidelity data as they implement behavior plans. They shared that while being observed and receiving feedback on their teaching can be a vulnerable experience for some participants, others were more open to it. Those open to feedback advised other teachers to practice a growth mindset of not taking a students' challenging behaviors personally. Lastly, participants need BCBAs to understand that by the time they are meeting with them, they have exhausted all their efforts and knowledge and need help.

Elements of Effective Collaboration

The first element of effective collaboration was for the teacher to recognize and acknowledge the BCBA as a behavior expert. Most participants were understood this. The only exception being a couple of experiences shared by teachers who were observed by BCBA's who were still under supervision and not yet licensed. However, there was a consensus acknowledge the legitimacy of the BCBA's unique skill, as reflected in this quotation:

I think that the BCBA, because of their extensive training and background have a little bit more of a skill set and a deeper bag to dig from when it comes to looking at that student and the unique situations and problem behaviors. [4.2]

Upon rereading this quote and thinking about what the participant was saying the researcher noted in their reflexive journaling the following commentary.

Reflexive Journaling (12/14/22): To look at this statement a bit more, it is interesting that the participant says the BCBA has an “extensive background” yet even with this background they only have “little bit more” skill set than a teacher. To me these points [sic] out a lack of understanding and rigor of BCBA coursework. I would have said this as a new teacher who had taken a few behavior classes, but now going through the BCBA coursework understand that I was naïve to think that as it seems this teacher is.

Participants talked about collaboration being more effective when they were dealing with specific behaviors, or they had questions they wished to ask the BCBA about. One participant shared the experience of asking their grade specific BCBA in the district about certain behaviors before having them come in to observe:

I asked her if she could come into the classroom and help me with some specific behaviors... I thought it was helpful to have them come in and address those specific behaviors that I was having trouble within the classroom. [5.3]

Teachers felt more in control in scenarios where they had pinpointed the problematic behavior and initiated the request for a BCBA, as opposed to instances where they could not identify the source of the problem and a BCBA had come in. In such instances, they felt like their teaching ability was being judged.

When the BCBA was easy to contact, this facilitated collaboration. A BCBA was considered easy to contact when the teacher could contact them directly and receive their help in a timely manner, rather than having to go through a long referral process and waiting. When behaviors are escalating, teachers need immediate help, and they cannot afford to take time to collect data and wait weeks for it to be analyzed and help to come. One participant shared that

her “district has really wonderful BCBA’s that I just need to shoot her an email and she’ll make a time for me within the week to come pop into the classroom.”

Teachers had many suggestions for how BCBA’s could improve collaboration. First, teachers felt the environment was more collaborative when the BCBA first listened to the teacher before giving feedback. This made them feel respected and valued as a professional. One participant described what an ideal collaboration looked like:

I was at my wit’s end with a student, and I happened to see [the BCBA] in the room finishing up with an older student. They were cleaning up and I walked in and said, “I do not know what else to do, when you have two minutes, will you come spend them with me, completely off, you know, off the record?” She dropped everything, walked into my room, and taught me a new routine. I haven’t mastered it, but I felt heard. I felt I now had something new to try. I felt I could get through the last two hours of that day, let alone come back tomorrow. It gave me the hope to continue... I feel like I have something that I can move forward on and at least attempt and maybe get better at. I also feel like I can go back to her again and say, “Okay. I’m doing this, how can I do it better?” The collaborative aspect really was there. I felt like she listened. She treated me like a professional. Everything that participant one, just said that would have made everything great was I feel like what happened. She listened, she tried to get a picture, a quick snapshot granted, we really did only have five minutes, but I felt like she did a very effective job of trying to understand my situation, the student’s situation, trying to get a feel for the why. She wasn’t going to come to an observation, but asking me and treating me like that professional, and then asking, “have you ever tried this”? So, it wasn’t even like she just said, “oh, you need to do this.” It was like, “Have you tried this? No, would

you like to? Yes, great. Let me give it to you in a snapshot," and then, truly, it wasn't more than a five, maybe seven-minute conversation, but I felt like she did treat me like a professional, she did listen, she did value what I said, and she also valued where I was coming from, which was pure frustration. [1.2]

The experience of this participant highlights so many of the aspects of this theme, elements that strengthen the relationship between teachers and BCBAs. First, this BCBA was easy to access because she worked in a nearby classroom at the same school. The participant had a specific question for her and let her know right away that she had exhausted all her efforts and was done. Then as they collaborated the BCBA listened to the teacher, valued the teacher's expertise, asked respectful questions, and made suggestions rather than telling her what to do. In this experience, it is evident that the teacher trusted and valued the BCBA's input because the teacher was willing to be honest and vulnerable.

To bring another perspective to this ideal collaboration situation just mentioned, the researcher recorded the following in the reflexivity journal:

Reflexive Journal (11/29/22): Reading this again it just screams to me that what teachers want and expect BCBAs to do is a mismatch with what they are actually trained to do. Sure, a BCBA can have a 5 min conversation with a teacher and give her ideas, but that is not much different than calling your mom on the phone, a BCBAs skill set lies in analyzing the behavior, finding the function, taking data and then they can offer suggestions and make plans that are way more likely to help. Teachers want quick solutions but must realize that is not what a BCBA does.

Another aspect of collaboration aspect, not captured in the previous account, is that BCBA's can be helpful in bridging the gap between school and home. This was true for a family-hired BCBA that came into one participant's school:

Some of [the student's] family members were not on the same page with either of us for a while and so it was difficult to help them. Because if we're implementing one thing at school and something else is going on at home, it's hard to help him learn something that will last for a long time. This most recent BCBA is really good at working with his family and so they're much more on board' and it's helped a lot. [2.2]

An important foundational element of collaboration that was mentioned in every focus group was trust. Participants explained that it was easier to develop trust and even just listen when a BCBA is willing to listen to the teacher first and shows respect. Laying a foundation of trust sets the stage for effective ongoing collaboration, "Those simple, social, soft skills, respect skills are extremely important for a BCBA who's going to be collaborating with anyone. You've got to develop a relationship of trust, otherwise why in the heck would we listen" [2.4].

Overall, each focus group shared experiences in which they (a) enjoyed collaborating with a BCBA and (b) developed an effective working relationship. Some of the reasons the collaboration was enjoyable was because they saw positive results when working together, such as helping students be more successful, finding solutions together, feeling like they could do more together when knowledge is shared, and finding it helpful to have a team to back you up on hard days and support when you need it. The focus groups noted that teaching is hard, but it is rewarding when they can keep students safe, healthy, and happy. By digging into these general statements from the participants, specific examples were found indicating what teachers and BCBA's can do to make the collaboration more effective.

Advantages of Working With a Board Certified Behavior Analyst

Many teachers used the same phrase “fresh eyes” to describe what a BCBA can bring to the table. By this they meant that BCBAs “look at things through a different lens” [1.2] to give you “something fresh to do” [1.1]. Some other metaphors teachers used to describe this same idea was that the BCBAs could “see the forest through the trees” [1.2], that they avoided “tunnel vision” [2.3], and that they brought an “extra set of eyes” [3.2]. The teachers acknowledged that even though they may still have a strong background in behavior, it was helpful to have an outside party with expertise to give them new ideas or even just remind them of things they may know but did not think to try:

It's very powerful to have somebody from the outside come in and tell you what you're doing well and maybe where you can tighten things up. It's not always easy to hear. But I think that can be helpful in providing new interventions after you've been observed. [4.1]

This participant expressed that part of what makes feedback helpful is when BCBAs are willing to explain what you are doing well, in addition to the things that could be improved.

Participants across all focus groups commented on the helpfulness of seeing interventions modeled for them by the BCBA before they were expected to perform them themselves. Seeing an intervention modeled in real-time in your classroom is more effective than reading about it on a behavior plan [1.3]. Participants also mentioned that it helps to see how the modeled intervention fits within the systems already in place in their classroom [2.1] It also allows the teacher time to ask questions and clear up any confusion. Administrators also agreed it was a more powerful way to assist teachers. [4.1] While this was a common advantage noted by many participants, one participant did express that they did not want a BCBA modeling because they “didn’t trust them in a classroom” with their students [3.2].

Another advantage participants mentioned was feedback on more than just teacher-student interactions but feedback or suggestions on the classroom environment and the teacher's general behavior. One participant described how a BCBA was able to teach them how many different factors were influencing their student's behavior:

One of the things that I learned a lot about was that my students' behaviors a lot of the time had to do with the way I was setting up my classroom and how I was reinforcing things and how I was behaving. So having somebody that will not just observe our interactions but observe what was happening between me and my student to say, "Oh hey, when this behavior happened, this happened right before. That behavior might go away if you modify your instruction just a little bit." [3.2]

This kind of feedback happens when a BCBA is in the classroom and has time to soak in the environment, understand how all the pieces fit together, and contextualize their plan. This can be a big advantage.

Administrators pointed out that another advantage of having a school based BCBA is that it provides them with clean, usable data:

I know in our district right now we have two schools with behavior units and one school has a BCBA, and one school does not. The biggest difference I see between the two of them is the one with the BCBA has much cleaner data and more usable data. It's easier to see pretty clearly the patterns that are happening with the students than at the other school. [4.1]

As far as a BCBA working with students there were two main topics. First, unique to the early childhood focus group was the importance of including a BCBA to help address challenging behavior early on so that students are prepared for the upper grades. Second, the

importance of following through and talking about the results was stressed, so that it can be confirmed whether the student is making progress.

I mean I feel like it's really rewarding to see successes from the student. Just to have something that you've implemented as a team actually work and everybody follow through with it and you see how the student progresses throughout their education, because of that plan, that's what I feel is the most rewarding. [5.3]

In summary, participants acknowledge the advantages of working with a BCBA. The most frequently mentioned reason being the importance of having “fresh eyes” in their classroom to see things from a new perspective. Seeing interventions modeled in the classroom was also noted as helpful along with getting feedback on more than just behavior management but the classroom environment. The participants from the administration group found the BCBA’s data to be usable and helpful. And lastly two advantages focus on student outcomes were that of having a BCBA for early intervention and helping students make progress.

Theme 4: Barriers to Effective Relationships Between Teachers and Behavior Analysts

The participants in this study mentioned many barriers they have faced in working with BCBAs. The overall theme of barriers to effective relationships between teachers and BCBAs included 3 main categories, categorized by the types of barriers. The categories are teacher perceptions of BCBAs, barriers to collaboration and barriers to execution. Each category was ubiquitous across focus groups.

Teacher Perceptions of Behavior Analysts

A lack of awareness and misperceptions about the role of a BCBA proved to be a common barrier across focus groups. First, every group but one had a participant mention they had no preconceived notions about the role of a BCBA because they had never heard of one. For

them, their barrier was not even knowing there was someone who could help them with their students' behaviors and, once they did, it was uncharted territory for them. Participant 1.2 shared, "We didn't even know who that was...we just started using BCBA's in the district. To me it's a new world. This is my first year using or have access to a BCBA" [1.2]. Explaining to teachers ahead of time what a BCBA is and how they can help was a solution participants mentioned in order to remedy approaching what is considered a "new world" to many of them. Participants also suggested that since many districts are just beginning to hire BCBA's, it is important to explain their role to all teachers, especially first-year teachers, with a flow chart that illustrates where a BCBA's role fits in the district.

While some teachers had never heard of a BCBA, others had heard of them before working with one. The things they had heard led them to have preconceived notions about them which made them hesitant to want to work with one. They had heard that a BCBA will just tell the teacher everything they are doing wrong, and that it creates a lot of extra work when you utilize a BCBA. A participant from the early childhood group shared how her colleague talked about BCBA's which made her nervous about reaching out to one as new teacher.

I thought she was just going to come in and judge me and my teaching style and tell me that I was only doing things wrong... I guess as a first-year teacher who doesn't really know what a BCBA is or what's going to happen when they come into that classroom, it's very scary. I had been told that you didn't want [the BCBA] to come into the classroom and so, that's why I was nervous about it... "Oh you don't want to have her come in, she'll just tell you that you're doing everything wrong", and yeah and I fell into that trap, but I actually really loved working with the BCBA" [5.3].

Ironically, the BCBA in this example had a reputation of not being easy to work with. This participant realized that their preconceived notions about the BCBA were wrong after having a positive experience with them. However, those perceptions may have kept her from receiving the help she needed. Another misconception teachers shared after having worked with a few BCBAs was that they always use their same three favorite interventions. “Everybody's time is too valuable to sit there and just rehash the same three interventions over and over and over again” [1.1].

Unique to the administration groups was the belief that BCBAs should be like a behavioral EMT, meaning when there is a behavior crisis, they would expect the BCBA to intervene to calm the situation. One participant shared an example of a student eloping and leaving the school, running to the street. She explained, “[w]hen you're looking at a behavior [like this], I think a lot of people go into panic mode and they want help, and they need help now because the sky is falling essentially” [4.2].

Teachers felt it hard to start the process with the BCBA when they were not easily accessible. This was more important for the BCBAs who worked with multiple schools, or those who were hired as a consultant, rather than housed at a single school. Participant 5.2 mentioned that the BCBA was always “trying to carve out time.” Others mentioned having to go through a referral process or contact a district behavior team [2.6].

Another barrier was that many participants felt it was the teacher’s job to solve behavior problems, so they had to do everything themselves. Consequently, many don’t seek help or find it personally difficult to ask for help. They explained that asking for help for help made them feel vulnerable and ineffective, like an admission that they can’t solve their own problems.

The act of asking for help from a BCBA is a pretty vulnerable thing for many teachers, who may be at the end of their bag of tools and tricks to use to try and help a student.

This may feel like a failure, even though it is not, on the part of the teacher and they may come to the BCBA in an emotionally difficult place which may make some teachers on the defensive [1.1].

The result of feeling vulnerable may be that teachers will act defensive and be less open to suggestions from the BCBA during collaboration.

Barriers to Collaboration

Not only are there barriers caused by preconceived notions or negative beliefs about CBAs when starting the relationship, but once past those there were also many barriers in working with CBAs shared by the teachers. As mentioned in the previous section, although teachers may initially want to collaborate, the following things done by CBAs can quickly dissipate the collaborative environment.

Generally, participants talked about CBAs who do not actually collaborate with them; instead, they act like they are in charge of the situation without taking any thought to collaborate or work with the teacher. Participant P2 felt that when this happens teachers do not want them to come back.

I feel like when a CBA walks into a classroom and starts telling the teacher, “You didn't do this. You didn't do this. You didn't do this. You didn't do that.” The teacher is not going to want a CBA to come back. They are there because they want suggestions not critique [P2].

Another experience that highlights this unwillingness to collaborate was shared in the administration group. One participant recounted how a BCBA not only would not collaborate with a teacher, but they also told teachers that they were doing things wrong.

[The BCBA] would tell different members in the team that they didn't know what they were doing, or that they were doing things wrong, or they would try to take over parts of process that weren't theirs, and they didn't actually know how to do those phases. We are still cleaning up files from some of that at that school. That person has left our district, and the school is happier place to be... The team just works better together and [before] you could come in and feel the contention when you sat with the team. One of the team members was ready to quit because of some of the things that were happening [4.1].

Two other things that teachers did not like was when they felt that the BCBA's were listening to them and acted as if the teacher's expertise was neither valued nor recognized. A participant shared that "I don't want to talk to the BCBA because when he or she comes in I feel like I'm being talked down to and they're not hearing what I have to say" [1.1]. Other teachers felt that it was not only hard for them to work with a BCBA, but it was also difficult to watch BCBAs work with other colleagues because they are good teachers that know a great deal:

Seeing them interact with other coworkers or people I know that I really respect and know have great skills in this field and manage challenging behaviors day in and day out, potentially their ideas being brushed aside, or their expertise not being acknowledged or recognized, just kind of taken for granted. Like this person has a lot of experience, but if they didn't have those letters behind their name their ideas weren't as valid or taken as seriously [5.1].

Perhaps the root of these barriers is the perceived attitude of arrogance among BCBA's. This was a common barrier to collaboration talked about in every focus group. The teachers expressed this by noting that the BCBA's were "coming off as *the expert* and everybody else doesn't know anything" [5.1 (emphasis added)]. One participant opined: "the BCBA is not some sort of guru person. They're not some sort of higher up. They just are a person who has a different skill set than me. The BCBA is not superman... the 'we have all of the answers for you poor uninformed plebes' spoke loud and clear to me" [1.1]. In another experience with a BCBA, the participant described feeling that "his word was kind of law" [2.3].

Another participant, who spoke very highly and had positive experiences with BCBA's in her classroom, even hinted at this same "superman complex":

There was one or two that sometimes left a little bit of a bad taste in my mouth, as far as potentially being, I don't want to sound rude or anything but maybe like a little bit lacking in humility, or the understanding that potentially different types of experience outside of formal education are also really valuable in this field and so, potentially discounting ideas or not even that but kind of a general attitude of knowing more when that's probably true when they do no more, but just in the interactive style potentially being a little more collaborative but overall, most of the ones I've worked with have been really wonderful and have great ideas and are very kind, and so I guess it would be more on an individual basis, if I had a struggle with an individual BCBA [5.1].

For whatever reason, these reports of arrogance are very prevalent and common among those who work with BCBA's, regardless of whether they were school-based, district-based, a consultant, or hired by a student's family.

Barriers to Execution

Once the teacher meets with a BCBA, and received their suggestions or a plan to implement, there are additional barriers that arise. Trust was a main topic in this theme. One participant shared their experience of not trusting the BCBA to come into her classroom to work with her students or model interventions with her students because in the past she felt judged, and the BCBA's felt that what was happening was her fault. To a BCBA coming in for a quick observation, they may be unaware of how their role and purpose could be misperceived by the very people they have come to help. In the case just noted, this experience was emotional for her to share. She explained:

My setting was in a severe classroom with students who had been sent away from public schools, it was the step before residential treatment, so we had the worst of the worst behaviors. There wasn't a level of trust I had. I didn't trust that they could come into the classroom, understand what was happening, understand the history, understand the lived experiences of the students really deeply. I'm going to share a little baggage here, I think there were times where I felt really judged and that it was my fault that the students were behaving that way and if I was a better teacher, I would have, I could kick that behavior in the bud. So, that's my baggage, I don't know that everybody has had that experience. So', I didn't want them to come into my classroom to model because I didn't trust them in a classroom, but I wanted to learn the principles and I wanted some observation, but I didn't trust them to give to my kids [3.2].

After listening to the concerns of these participants, it was clear that some teachers who work with special needs students develop such a love and concern for the students they work with, it is difficult for them to let someone—especially someone they perceive as having an arrogant

attitude—work with their students. Along with the idea of a teacher having difficulty trusting a BCBA with their students, another participant said in a follow-up email after the focus group,

I also think there is often a sort of one-sided trust expectation. The teacher is supposed to trust the advice of the BCBA (because they have the infallible, always right and can do and teach any skill ABA on their side) but because the teacher has what is often perceived as less infallible training, the BCBA does not need to show the same trust in the teacher's professional opinion or input. Why should a teacher blindly follow someone who thinks their training is better than the teacher's training or experience" [1.1]?

While some participant found it difficult to trust a BCBA to work with their students, others found it hard to even be observed by a BCBA. Participants mentioned feeling vulnerable and uncomfortable being observed. This was discussed in the early childhood focus group, where the younger teachers all mentioned this. There was also a seasoned teacher of over 20 years who talked about how her student teachers felt this way too, and it may just be a new teacher thing. One of the younger teachers said, "It can be uncomfortable or scary to have someone observe you and potentially judge how you are trying to work with a student" [5.1]. A more seasoned teacher added why this may be uncomfortable. They noted that even if they are confident in their own teaching skills, the BCBA sees things differently and may judge them according to the standards of their discipline—a discipline that the teacher is not well-versed in.

... according to your lens and your expertise, am I doing things right or not? Because, according to my beliefs and my education and skillset, I'm doing best practices, but do they align with what you're seeing as well and I even with 19 years of experience recognize that I sometimes also fall into that, like what I mentioned earlier about the not taking away recess time. Anyway, I think that this is vulnerability is hard in general [5.2].

Some participants talked about feeling pressure to agree with and do everything the BCBA recommended because whether they pushed back or not, they had no other option for help. This made teachers feel insecure when working with a BCBA at times. “I’m realizing if I disagreed with something that she said how would that work, and I think that could be really sticky and kind of awkward at times.” [2.2] For teachers with BCBAs who worked on site, they felt that their emotions could get in the way of their relationship during difficult behaviors. “It’s socially significant for everyone involved because it’s a challenging and emotional time whenever behaviors are escalating, it gets very emotional for the adults because we can’t always figure out how to change the behavior that’s impacting so many” [1.4].

Two focus groups brought up the technical and academic jargon BCBAs sometimes use. Some felt like BCBAs used it as a way to talk down to the teacher. Others mentioned that while it was hard to work with a BCBA because they did not always understand the terms the BCBA uses, they acknowledged that teacher jargon may be hard for a BCBA to understand, so both sides need to work together and be willing to translate the terminology of their professions:

... because our vocabularies were so different between a BCBA and a person who comes from a trauma background, the vocabulary is so hard to navigate through and reinforcement contingencies and motivating operations and your EOs and your MOs and all of those. I think there’s a way to talk about things in ways that we can both understand, but there has to be a willingness to translate. So, one of the things I would love and I have tried to facilitate is the translation...I think that would be really helpful going forward is to have more have more flexibility on both parts [3.2].

For BCBAs, most people they talk to will not understand some of the more technical terms they use, so the ability to communicate technical jargon in everyday terms is an important skill. To be

effective in working with teachers, administrators, and parents, BCBAs must be careful to ensure that they understand the technical behavioral processes they are performing. While it may be more intuitive to assume that this counsel is more applicable to parents than other teaching professionals, such an assumption would not be a safe one.

Overall, there are many barriers when working with a BCBA. These can come into play from the time a teacher starts thinking about seeking help from a BCBA, to the time they begin collaborating with a BCBA, and throughout the process of executing and implementing the plan crafted by the BCBA.

CHAPTER 5

Discussion

This study explores the experiences and perceptions of special education teachers and special education administrators who have worked with a BCBA in a school setting to better understand their experiences. The study used a Multiperspectival IPA focus group design to compare special education teachers' and administrators' perceptions of working with BCBAs in different settings. Main findings based on the data analysis included 4 themes (a) Background relationship with BCBA; (b) Contextual fit of interventions; (c) Elements that Help the Relationship between Teachers and BCBA; and (d) Barriers to effective relationships between teachers and BCBA. This chapter will discuss how the themes match and contribute to current literature along with limitations of this study, implications for practice and suggestions for future research.

Background Relationship With Behavior Analysts

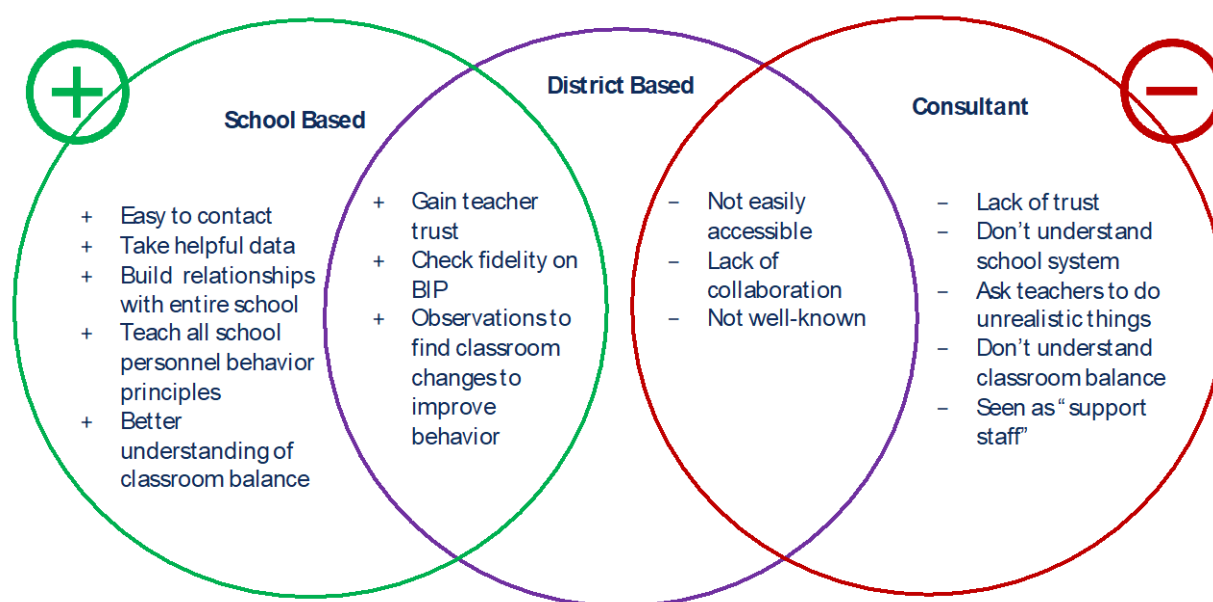
The biggest finding from this section was that school-based BCBAs create interventions that have better classroom contextual fit. BCBAs hired from outside the district generally did not understand the teacher or the classroom enough to help the teacher. This is significant because it shows that it is imperative to have a BCBA in a school or with school knowledge to be of most help.

The researcher went through all the codes and listed them under which BCBA they would fit under. Out of all 51 codes there were 17 that were particular to the type of BCBA. School-based BCBAs had an additional 8 codes that were all positive. While Consultant BCBAs had an additional 8 codes all of which were negative. District-based BCBAs had both positive and negative codes that overlapped. This shows that throughout the focus groups, school based

BCBAs were more positively talked about and had more advantages. Consultant BCBAs were more likely to be associated with negative comments and experiences. While District BCBAs were a middle ground of both positive and negatives. This finding is visually summarized in Figure 7. This is a finding unique to this study that has not been shown in the literature.

Figure 7

Unique Advantages/Disadvantages of Board Certified Behavior Analysts



One of the expert reviewers mentioned that it would be interesting to explore the power dynamics between teacher and BCBA. For example, looking at gender or race differences. They thought this could help understand the context more as well. The expert review also thought it important to see how clearly the BCBAs roles were defined within a school district because if a BCBA is above a teacher in hierarchy, this would influence the interactions as well. Some questions to consider with district and school based BCBAs that the review shared were, "Do teachers need to follow their lead as a condition of employment? Did teachers ask for the BCBA

to come to their class, or are they simply support personnel that the teachers can ignore?” This is an area that our study did not look deeply into. The following table is a summary of the current literature and how it maps onto the findings of this study.

Table 5

How Findings Map Onto Current Literature

Categories	Current Literature	Our Findings
Contextual Fit of Interventions	A framework to guide consultant BCBAs through best practices when in school settings (Mueller & Nkosi, 2007)	BCBAs need to understand school settings and context elements
	Model for BCBAs within a school district to collaborate (Layden, 2022)	BCBAs need to understand and collaborate more with teachers.
	Websites to help BCBAs understand schools (VanDerwall & Poling, 2021)	BCBAs need more school experience to be helpful. “This outsider didn't know how to navigate a school.” [2.4]
Barriers to effective relationships between teachers and BCBA	Jargon BCBAs use and how it is not pleasant sounding (Critchfield et al., 2017; McMahon et al., 2021)	“a lot of jargon being thrown at me...” [1.1] Jargon was often mentioned in focus groups.
	BCBA arrogant attitude found in collaborating with other service providers (Gasiewski et al., 2021; Manlapaz, 2018)	This was talked about in every focus group. “Coming off as <i>the expert</i> and everybody else doesn't know anything.” [5.1, emphasis added]
	BCBAs feel like they do not have the time or resources to be effective in schools (Drumb, 2018; Max & Lambright, 2022)	Teachers also feel this and wish the BCBA was more accessible and spend more time collaborating.
Elements that Help the Relationship between Teachers and BCBA	BCBAs need a model to guide their services in schools (Kelly & Tincani, 2013; Giangreco et al., 2021)	Collaboration is the key and understanding where BCBAs fit in the school system.

Note. BCBA = Board Certified Behavior Analyst

Contextual Fit of Interventions

This study used the term “contextual fit” to describe what to behavior analyst is more commonly known as social validity. While the two terms slightly differ, there is much overlap. Contextual fit looks solely on the intervention. It checks to see if there is match between the strategies, procedures, and elements to the values, needs, skills and resources of those who implement and experience the intervention (Benazzi et al., 2006).

Social validity looks at three things, the social significance of the behavior goals, the appropriateness of the intervention, and the social importance of the outcomes (Wolf, 1978). Many forms have been created by behavior analysts to check for social validity before beginning an intervention. Generally, this is given to parents or practitioners. One example is the Treatment Acceptability Rating Form (See Figure 8; Reimers & Wacker, 1988). Some of the questions include: How clear is your understanding of the suggested procedures? How willing are you to implement the suggested procedures as you heard described? How disruptive will it be to your classroom to implement the suggested procedures? (Cooper et al., 2020; Reimers & Wacker, 1988) Using a form like this with teachers could mitigate the issues participants mentioned of BCBAs having lack of contextual fit.

Figure 8*Treatment Acceptability Rating Form*

Treatment Acceptability Rating Form—Revised (TARF-R)

1. How clear is your understanding of the suggested procedures?

Not at all Neutral Very

2. How acceptable do you find the strategies to be regarding your concerns about the identified learner?

Not at all Neutral Very

3. How willing are you to implement the suggested procedures as you heard them described?

Not at all Neutral Very

4. Given the learner's behavior issues, how reasonable do you find the suggested procedures?

Not at all Neutral Very

5. How costly will it be to implement these strategies?

Not at all Neutral Very

11. How disruptive will it be to your classroom to implement the suggested procedures?

Not at all Neutral Very

19. How willing would you be to change your classroom routine to complement these procedures?

Not at all Neutral Very

20. How well will carrying out these procedures fit into your classroom routine?

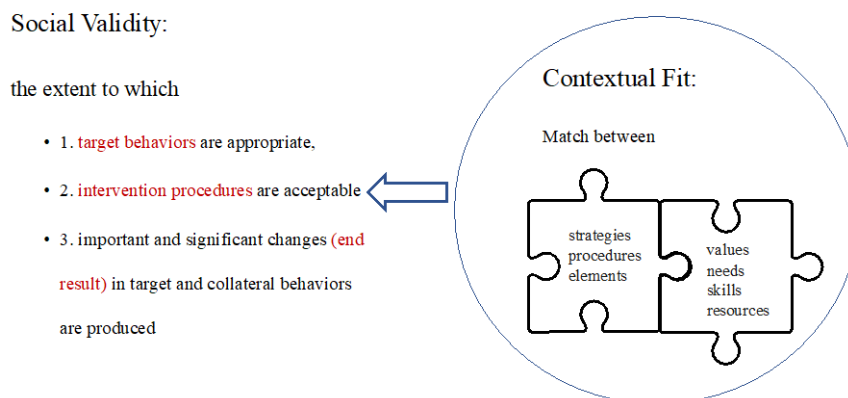
Not at all Neutral Very

Note. Adapted from Cooper et al. (2020, p. 232)

Out of all the focus groups it was never brought up that the BCBA asked about these things after giving behavior advice or a behavior plan. Perhaps something like this tailored to special education teachers and classrooms would help BCBAs understand what teachers need and the needs of the classroom. There is nothing in the literature about asking or adapting social validity forms or rating scales to teachers.

It is commonly recognized in the literature the challenge BCBAs face when working the schools. In the literature are various frameworks for BCBAs to follow to help mitigate the gap of knowledge between clinical and school interventions. Recognizing that the school environment may be foreign to many BCBAs, VanDerwall and Poling (2021) wrote an article to explain six education websites that a BCBA could access for free to learn about the roles and activities of school professionals along with the structure, function, and mandates of schools. The purpose is to help BCBAs become comfortable and confident in a school setting.

In a qualitative study asking BCBAs about their experiences using ABA in schools they found that BCBAs felt they did not have adequate time or resources to provide staff sufficient training in ABA that would lead them to being successful in their interventions. They also felt a lack of support from school administrators (Max & Lambright, 2022). This finding aligns with our current findings under contextual fit, more specifically that teachers liked the behavior plans but did not have the resources to implement it, the BCBA asks teacher to do unrealistic things, and the BCBA is not easily accessible. The article shows that BCBAs are feeling like the special education teachers. These findings are visually represented in Figure 9.

Figure 9*Overlap of Social Validity and Contextual Fit***Barriers to Effective Relationships Between Teachers and Behavior Analysts**

The technicality of the language used by BCBAs has long been criticized, in fact Critchfield et al. (2017) found that behavior analytic terms are rated as “more unpleasant” than terms of other disciplines (Critchfield et al., 2017). In a study were 164 teachers were surveyed to (a) evaluate the social acceptability of technical and nontechnical language used in behavioral consultation across a variety of student populations and (b) gain information about teachers’ experiences with behavioral consultation (McMahon et al., 2021). Results showed that when participants were presented with a technical/nontechnical term comparisons 90% of the time the nontechnical term was more socially acceptable than the technical term. The matches our finding from two focus groups where teachers talked negatively about the jargon BCBAs use. The article talks about the importance of practicing and using non-jargon words when doing behavioral consulting and how it’s surprising with the demand for BCBAs in schools that this is not emphasized more in the BCBA coursework (McMahon et al., 2021).

In related fields of speech pathology and occupational therapist, studies addressing collaboration between these service providers and behavior analysts have noted that behavior analyst tend to have an arrogant attitude (Gasiewski et al., 2021; Manlapaz, 2018) These findings match our findings from every focus group where special education teachers perceived BCBA's seemed arrogant or expressed an attitude of "better than everyone."

Mirroring further researcher, this study found lack of accessibility to the BCBA as another barrier (Drumb, 2018). Participants in all group mentioned it was difficult to contact the BCBA and that they did not feel they "have enough time with the BCBA."

Elements That Help the Relationship Between Teachers and Behavior Analysts

There were many barriers to collaboration between teachers and BCBA's. The extant literature recognizes there is little to no guidance on what the role of the BCBA is in the provision of related services. In a study surveying 302 behavior professionals, participants shared they received little to no formal training in collaboration though they were expected to collaborate with a variety of professionals regularly (Kelly & Tincani, 2013). To encourage discussions among stakeholders on this topic, Giangreco (1996) and Giangreco et al., (2021) provided a set of guidelines, or decision-making practices (known as VISTA), for school-based professionals to use when collaborating.

Positioning a BCBA as a related service provider could help define the role and the relationship between the special education teacher and the BCBA. Special education teachers have experience working with other related service providers on an IEP team. Special educators perceiving a BCBA as a related service provider could foster understanding and collaboration by having them as part of the team and not as an outsider. Findings from this study indicated that the role of a BCBA was never specified or clarified with special education teachers. Doing so

could help special education teachers and BCBAs better understand one other. For example, clarifying roles could help special education teachers better understand a BCBA's training and ethical constraints. This was a topic I pursued in my reflexive journaling. I pondered over a participant's comment about a BCBA's training in regard to the breadth of problem behaviors and situations that are common in schools. This also influenced my reflexive journaling when I considered how my own perspective as a new teacher failed to consider the depth and complexity of much of the training that my colleagues working as BCBAs could bring to the situation. In general, it appears that a common understanding is not so common between our colleagues in schools. Likewise, clarifying roles could also help BCBAs to better understand and respect the level of a special educator's expertise relative to behavior. BCBAs need to understand a special education teacher's background and training as most have completed both coursework and professional development in behavior.

Other than understanding the training BCBAs receive it is important for special education teachers to understand the ethical limitations BCBAs may have that are especially unique in school settings. For example, code 1.05 in the Ethics Code for Behavior Analysts states,

“Behavior analysts practice only within their identified scope of competence. They engage in professional activities in new areas (e.g., populations, procedures) only after accessing and documenting appropriate study, training, supervised experience, consultation, and/or co-treatment from professionals competent in the new area.

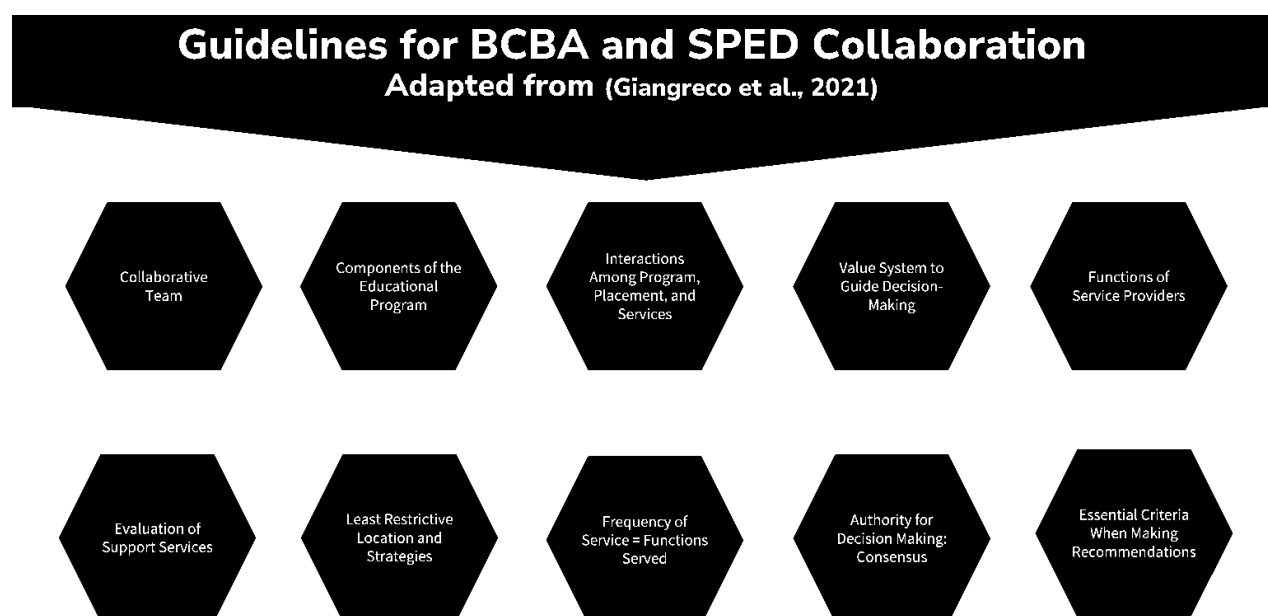
Otherwise, they refer or transition services to an appropriate professional.” (Behavior Analyst Certification Board, 2020, p. 9)

Understanding of the ethical constraints would greatly impact a teacher's understanding of a BCBA. For example, if a teacher requests a BCBA help with a problem behavior or

disability that the BCBA is not qualified to practice due to their identified scope of competence, this could be a problematic interaction. In the data from this study special education teachers never mentioned a BCBA explaining their ethical limitations. Within the collaboration framework, it is important for a BCBA to explain that the ethics of their profession may limit their ability to do certain things. A summary of these guidelines for collaboration is found in Figure 10.

Figure 10

Guidelines for Behavior Analyst and Special Educator Collaboration



Implications

An important takeaway is that BCBAs need to better understand the complexity of a teacher's world within the contexts of schools. Special education teachers amongst all focus groups talked extensively infeasibility of incorporating BCBA's suggested interventions in the real world of classrooms and schools. This would help the BCBA provide more effective services in schools. Bethune and Kiser (2017) published an approach to building a master's degree program tailored to students pursuing the BCBA coursework and special education certification. This could be a great approach to preparing BCBAs to work in schools.

For BCBAs already practicing in the field, it is important for them to consider the fit of the intervention to the specific teacher, classroom and school fit. To this end, BCBAs could consider incorporating the Treatment Acceptability Rating Form (TARF; Reimers & Wacker, 1988). The Treatment Acceptability Rating Form could be utilized by special education instructors and BCBAs to assess social validity and contextual appropriateness (TARF; Reimers & Wacker, 1988). The Treatment Acceptability Rating Form consists of 15 items on a Likert-type, seven-point scale and was originally developed to measure the acceptability of clinically developed treatments to parents. BCBAs and special education teachers could collaborate around the TARF to check for social validity and contextual fit (TARF; Reimers & Wacker, 1988).

Future Research

The following proposals for further research were heavily impacted by the expert reviewers' suggestions. Given the available resources, researchers could investigate the most effective ways BCBAs could assist teachers in the classroom. Studies could also be organized around the negative perceptions special education teachers have connected to BCBA jargon. In

addition, researchers might study the most effective ways for teachers to comprehend the ethical limits of BCBAs in practice.

Limitations

In our study with Multiperspectival IPA groups, one thing we could have done was dyad focus groups with teachers and BCBAs. We did not have the BCBAs' perspectives, we just drew on the literature from the field. We noted that there were big differences between school- and not school-based, but we did not have the perspective of school-based BCBAs. Perhaps the results would have been different with both perspectives.

Conclusion

Special education teachers need more behavior support in the classroom. BCBAs are uniquely equipped with the skills to help. However, BCBAs need more specific training on how to help in school and classroom environments to be effective. This study uniquely adds to the literature in that it gives a voice to special education teachers and what their experiences have been with BCBAs in the classroom, and it shows how different types of BCBAs that work in schools have different strengths and weaknesses.

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APPENDIX A

Institutional Review Board Approval Letter**Memorandum**

To: Beth Cutrer
 Department: BYU - EDUC - Counseling, Psychology, & Special Education
 From: Sandee Aina, MPA, HRPP Associate Director
 Wayne Larsen, MAcc, IRB Administrator
 Date: February 23, 2022
 IRB#: IRB2022-060
 Title: Special Education Teacher and Board Certified Behavior Analyst Collaboration

Brigham Young University's IRB has approved the research study referenced in the subject heading as exempt level, Category 2. This study does not require an annual continuing review. Each year near the anniversary of the approval date, you will receive an email reminding you of your obligations as a researcher and to check on the status of the study. You will receive this email each year until you close the study.

The study is approved as of 02/23/2022. Please reference your assigned IRB identification number in any correspondence with the IRB.

Continued approval is conditional upon your compliance with the following requirements:

1. A copy of the approved informed consent statement can be found in iRIS. No other consent statement should be used. Each research subject must be provided with a copy or a way to access the consent statement.
2. Any modifications to the approved protocol must be submitted, reviewed, and approved by the IRB before modifications are incorporated in the study.
3. All recruiting tools must be submitted and approved by the IRB prior to use.
4. Instructions to access approved documents, submit modifications, report adverse events, can be found on the IRB website, iRIS guide: <https://irb.byu.edu/iris-training-resources>
5. All non-serious unanticipated problems should be reported to the IRB within 2 weeks of the first awareness of the problem by the PI. Prompt reporting is important, as unanticipated problems often require some modification of study procedures, protocols, and/or informed consent processes. Such modifications require the review and approval of the IRB. Please refer to the [IRB website](#) for more information.

APPENDIX B

Consent Form

Focus Group Consent

Title of the Research Study: Special Education Teacher and BCBA Collaboration

Principal Investigator: Beth Cutrer

IRB ID#:

We are asking you to take part in a research study conducted by Megan Squires at Brigham Young University-Provo. The study is being supervised by Professor Beth Cutrer, of the Counseling Psychology and Special Education.

We are holding a focus group of 4-6 people to learn more about special educator's experiences working with BCBAs. The focus group will last about 1 hour. The focus group will be audio recorded. You can skip questions that you do not want to answer or leave the group at any time. We will keep the data we collect confidential, which means we will not share your personal information with anyone outside the research team.

We will ask you and the other people in the group protect each participant's privacy. Please do not discuss with anyone outside the group what any particular person said. However, we cannot guarantee that each participant will keep the discussions private. Only the researcher will have access to the data collected. Any audio tapes/files of the focus group will be destroyed after one year or at the end of the study; transcripts will not contain any identifying information and will be kept for future analysis. Excerpts and/or direct quotes may be used in publications/presentations.

During the Study, researchers will audio record you. Your consent below allows BYU to use these recordings for purposes associated with the Study.

Participant Consent

I understand that researchers will take [audio recordings of me as part of this Study. I give permission for BYU to use the Media in scientific publications, scientific conferences or meetings, educational presentations, public presentations to non-scientific groups, and other uses related to the Study so long as my name is not used. I agree that all Media will become the property of BYU, and I waive my right to inspect, approve, or be compensated for BYU's use of the Media.

By signing below, I certify that I have read this Consent to Use Audio Recording and agree to its terms.

Name of Participant: _____

(Please Print)

Signature of Participant

Date

Questions? Please contact Megan Squires at mmoeller@student.byu.edu. If you have questions or concerns about your rights as a research participant, you can call the Human Research Protection Program at 801-422-1461 or BYU.HRPP@byu.edu.



IRB NUMBER: IRB2022-060
IRB APPROVAL DATE: 02/23/2022
Focus Group_v9/2021

APPENDIX C

Instruments

Focus Group Interview Script

Hello, thanks for being here today! I'm looking forward to talking with you all. I'm _____ and this is _____. S/he will be taking notes as we talk and might ask questions sometimes. Her/his notes won't include your names or identifying information connected to your comments.

Just as a reminder, we are talking to you to find out about your experiences working with a BCBA in your classroom. There are no right or wrong answers, we just want to know about your thoughts and experiences. Your name will be confidential.

We will talk for about 25 minutes. You will then have a break for 5 minutes. After the break we will visit for about 30 more minutes

Before we get started, I'm going to go over some guidelines for the group discussion:

- Everything you say will be kept confidential. The research team will not share any information that will identify you. We'll be referring to you by the number on your screen, in order to keep everything confidential. So, that means that before you share something, please say out loud the number on your screen. That will help us later as we transcribe this group discussion recording.
- In the same way, remember to keep personal stories "in the room"; do not share the identity of the other participants or what anybody else said outside of the meeting.
- If you feel uncomfortable during the meeting, you have the right to leave or to pass on any question.

What questions do you have?

Questions

1. Let's get started! In what ways have you interacted with a BCBA?
2. Tell us about your thoughts on why you would or would not work with a BCBA?
3. There are lots of reasons why teachers may seek help from a BCBA. What do you think the reasons are for seeking help from a BCBA it any?
4. The next question will be a card sort. I will post a link to a Jamboard in the chat. Please open the link to see the cards. Here's what researchers say about what teachers find helpful in working with a BCBA. Could you look at these and order them from what you think would be most helpful to least helpful in working with a BCBA? There are blank cards that you could write your thoughts, a disagree card to let us know if there's an option on this list with which you disagree, and "an experience I can share" card.

Card sort task: Sort the following options in order from most helpful to least helpful.

- a. To answer specific questions about challenging behavior in the classroom
- b. To provide new, helpful interventions
- c. To teach basic behavior principles
- d. To model new interventions in the classroom
- e. To observe you implementing interventions and provide feedback.
- f. To be an active member on IEP and other school teams
- g. To review and interpret behavior data with you.
- h. Disagree
- i. [blank]
- j. [blank]
- k. [blank]

After they're done sorting: Tell me about how you lined up these cards? Why is this the most helpful option? Why is this the least helpful option?

Debrief: Are there any of these options that ring true for you as reasons that you do (or would) seek help from a BCBA?

Debrief: I would love to hear some of your experiences with working with BCBA

5-minute break

- 5. We know that there are teachers who find it challenging to collaborate with a BCBA. Why do you think a teacher would have a challenging time collaborating with a BCBA if at all?
- 6. Challenging behavior in classrooms can contribute to teacher stress and teacher burnout. What are your thoughts about the effectiveness of a BCBA in supporting teachers in dealing with challenging behaviors, if any?
- 7. I'm curious about your thoughts on what BCBAs could do to be more helpful resource to special education teachers if anything?
- 8. In your role as blank what do you see that you could do if anything to help teachers and BCBAs
- 9. Think about anything else you want to share that we haven't talked about yet. Are there any other ideas you would like to share?

Thank you all for the contributions you made to our group discussion! You are free to go.