University of Northern Iowa

UNI ScholarWorks

2022

Training for challenging behaviors in the school setting

Kenzie Heusinkvelt
University of Northern Iowa

Let us know how access to this document benefits you

Recommended Citation

TRAINING FOR CHALLENGING BEHAVIORS

IN THE SCHOOL SETTING

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Education Specialist

Kenzie Heusinkvelt

University of Northern Iowa

July 2022

ABSTRACT

School personnel are asked to plan for, implement, and evaluate Behavior Intervention Plans (BIPs) in the school setting; however, not all school personnel have been properly trained to do so. There is limited research to date that demonstrates how different school personnel are trained in planning, implementing, and evaluating BIPs. The current study involves school personnel which include school psychologists, school social workers, special education consultants, and special education teachers. These school personnel were asked to indicate how adequate they believed their educational training was in providing a good understanding of various behavior topics and how well their educational training prepared them to implement various behavior skills. The second part of the survey asked school personnel to think about their confidence in planning, implementing, and evaluating components of a behavior intervention plan (BIP). Results from this study indicate school personnel of different training backgrounds reported varying levels of confidence and knowledge when it comes to the BIP process. School psychologists tended to have the highest confidence in planning, implementing, and evaluating BIPs, while special education teachers had the lowest confidence. Confidence in planning for BIPs was highest for progress monitoring and lowest for integrity. School personnel rated the highest area of training for implementation as progress monitoring with the lowest being integrity. School personnel rated progress monitoring to be the highest for confidence and knowledge for planning and preparing for BIPs along with confidence in implementation. Personnel rated high knowledge of and confidence in their ability to be able to correctly evaluate the efficacy of functional behavior assessments. The results of

this study indicate more training should be provided to school personnel. Training programs and employers should reexamine the content school personnel are receiving around the BIP process to increase confidence and knowledge in planning, implementing, and evaluating BIPs. An increased emphasis on integrity should be examined.

TRAINING FOR CHALLENGING BEHAVIORS

IN THE SCHOOL SETTING

A Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Education Specialist

Kenzie Heusinkvelt

University of Northern Iowa

July 2022

This Study by: Kenzie Heusinkvelt

Entitled: Training for Challenging Behaviors in the School Setting

has been approved as meeting the thesis requirements for the

Degree of Education Specialist

_____   _____
Date   Dr. Nicole Skaar, Chair, Thesis Committee Member

_____   _____
Date   Dr. Susan Etscheidt, Thesis Committee Member

_____   _____
Date   Dr. Mary Losch, Thesis Committee Member

_____   _____
Date   Dr. Gabriela Olivares, Interim Dean, Graduate College

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

<u>Background Information</u>

In the 2019-2020 school year, around 7.3 million (14%) of all students in the U.S. received special education services (National Center for Education Statistics, 2022). Of these students, 5% were categorized under Emotional Disturbance (ED) and 11% were categorized with Autism Spectrum Disorder (ASD). Approximately 1,168,000 students fall under these two categories. Kids who are labeled with ED or ASD are the students who are likely to have Behavior Intervention Plans (BIPs) (National Center for Education Statistics, 2022). While there is limited research on the prevalence of students with BIPs, Long et al. (2016) examined the prevalence of intervention plans within the state of Connecticut and found 95% of teachers implement some intervention in the general education setting in public schools. On average, these classrooms had four students who needed specialized instruction and a plan to guide implementation, and approximately 30% of these students' received interventions for behavior and social emotional support (Long et al., 2016).

Problem behaviors in school settings are important to address because they interfere with academic performance (Henricsson & Rydell, 2006). BIPs are legal documents that correspond with Individualized Education Plans (IEPs) and are mandated for students who display challenging behavior (Wright et al., 2013). The BIP needs to be implemented with high levels of integrity and fidelity for the best intervention outcomes. Integrity can be defined as implementing the correct steps of intervention reliably (Wilder

et al., 2006). Fidelity can also be defined as implementing correct procedures of an intervention precisely and over an extended period of time (Hirsch et al., 2017). Integrity and fidelity can be used synonymously, and for simplicity, this paper will use the term integrity when discussing correct implementation.

Behavior intervention plans implemented with high levels of integrity lead to a larger effect size for a reduction in problem behavior than do those with low levels of integrity (DiGennaro et al., 2007; Fryling et al., 2012). High rates of integrity can also increase the frequency of appropriate replacement behaviors (Pipkin et al., 2010). Therefore, behavior intervention plans can effectively reduce problem behavior and increase use of replacement behaviors when implemented with high integrity. To help students with behavior issues succeed in the school setting, it is imperative teachers implement evidence-based behavior interventions with high integrity. Students in special education receiving these evidenced-based interventions need a BIP to document the individualized interventions and to ensure staff follow through with the plan. For students with behavior issues, the first step to help them be successful in the school setting requires decreasing problematic behaviors and increasing appropriate replacement behaviors.

<div align="center">Limitations of Current Research</div>

While there is knowledge on effective training for teachers implementing behavior plans with high integrity, there are still gaps within the literature. Little is known about long term behavior intervention integrity. One study conducted a 15-week follow-up integrity check, but a greater extended time period should pass before integrity

checks are performed to examine if teachers can implement a BIP with high integrity throughout the school year (Codding et al., 2005). A future consideration should be the feasibility of maintaining high rates of integrity. Booster sessions may be needed if integrity rates drop after longer periods of time; however, if integrity remains high, no further instruction for teachers would be needed.

Future work should aim to characterize the generalizability of implementing interventions with integrity. Behavior interventions can be implemented with high integrity in many settings; however, it is not known if teachers can generalize to other students' behavior plans. More specifically, can the plan generalize to other students with similar behavior topographies and similar behavior plans. If teachers can generalize across similar behavior plans, it would then be beneficial to know if the targeted training for one student can generalize to other students with different behaviors and different plans. Research on generalization presents a large gap within the literature, despite it being essential to effectively support teachers. If teachers cannot generalize behavior plans across students, they need to have training for every new student they work with in their classroom. Training teachers on different behavior plans will require allocation of resources. Research on generalization will help to ensure support is provided to teachers, so they have the necessary knowledge and support to best help the students they serve. Less time and fewer resources will be needed to provide continued teacher training if teachers are able to generalize previously learned skills to other student behavior intervention plans.

Next, there is a concern about how most teachers are trained to implement the behavior plans in their classrooms. Most pre-service teachers are required to take a classroom management course, but some states do not identify these courses as evidence-based (Freeman et al., 2014). If pre-service teachers are exposed to evidence-based practices in the areas of classroom management, they are not provided with enough content to be prepared to work with students who have challenging behaviors (Freeman et al., 2014). Additionally, masters level teachers reported having limited knowledge of behavior concepts and reported having limited pre-service training in this area (Begeny & Martens, 2006). Overall, there seems to be a lack of behavior training for teachers, which impacts their ability to implement BIPs with high integrity. This creates a disconnect between teachers' pre-service training and their ability to handle and implement behavior plans.

There is much to consider with respect to pre-service teacher training on behavior plan implementation; however, there is limited research on pre-service teacher training in implementing behavior plans for students with challenging behaviors and whether or not teachers are instructed on the importance of intervention integrity. This type of training is essential for improving behavior problems in the schools, and research to better understand the types of training received by school personnel is needed. Knowledge about how teachers are trained can lead to advocacy for change, when needed. If teachers are not being trained effectively, we cannot expect them to implement behavior interventions effectively and with integrity. However, teachers are expected to correctly implement behavior intervention plans (Wilder et al., 2006). Incorrect implementation of

BIPs is a clear barrier to students' academic and behavior success and could become a legal issue if it results in a failure to provide a free and appropriate public education (FAPE). The school is legally mandated to implement the correct behavior plan for a student, and if teachers are not doing it correctly and consistently, the student is not receiving the services deemed necessary, which is a denial of FAPE (Guntersville City Bd. of Educ., 47 IDELR 83 (SEA AL 2006).

Additionally, there is no published research to show the prevalence of integrity checks in the schools. Data should be collected on how schools are performing integrity checks and how often these checks are being done. The rates of implementation integrity should be collected and analyzed to determine how well behavior plans are implemented. If integrity checks are not a regular practice in the school setting, data should be collected on why schools do not have integrity checks in place. Information should be collected on what would need to happen to get these plans put into place and what supports would be needed to help integrity checks become a regular practice.

<div align="center">Statement of Purpose</div>

Legal questions should be asked about implementation integrity. While the law holds schools responsible in some areas, there is a lack of responsibility in others. There are no clear laws or regulations surrounding integrity. A recent court case involved the Calvert County Public School District's failure to implement a behavior plan. The finding was that the failure to implement the behavior plan was a denial of the child's right to FAPE guaranteed by the Individuals with Disabilities Act (IDEA) of 2004 (Calvert County Public Schools, 2019). Integrity checks are important to ensure IEPs and BIPs are

being implemented in the schools, and they are being implemented as stated in the BIP and IEP documents. This is an important consideration because the best outcomes for students happen when plans are implemented with high integrity (DiGennaro et al., 2007; Fryling et al., 2012). Without integrity checks, intervention plans may not be correctly and consistently implemented, and, in turn, students do not receive the services in the legally binding documents (i.e., BIPs and IEPs) that memorialize the special education services they are entitled to receive.

With BIPs being legally binding documents, it is important to understand the training school personnel receive to plan for, implement, and evaluate BIPs. Additionally, school personnel's confidence and knowledge in planning, implementing, and evaluating components of a BIP should be studied to understand how BIP training can be improved. School personnel who work with BIPs have different training experiences, and it is important to research how the differences in training affect their knowledge of the BIP process. School personnel need to have quality training to plan for, implement, and evaluate BIPs with fidelity to ensure FAPE.

This research can inform future training programs, professional development, and other training programs. If school personnel are better trained in skills needed to plan for, implement, and evaluate BIPs, then they are in the best position to implement BIPs with integrity and support students' behavioral needs. Many ways to train school personnel effectively and efficiently have been researched, but it is unknown what training has actually been provided to school personnel to allow for confidence and knowledge surrounding the BIP process.

<u>Research Questions</u>

1. Regarding planning, implementation, and evaluation of BIPs, to what extent do different school personnel report different perceptions of adequacy of training and confidence in practice?

2. To what extent do school personnel (overall and by profession) report adequate training for understanding behavioral concepts and for implementation of those concepts?

3. To what extent are school personnel (overall and by profession) confident in their knowledge of planning, implementing, and evaluating BIPs?

CHAPTER 2

REVIEW OF THE LITERATURE

<u>Laws and Regulations</u>

Behavior Intervention Plans (BIPs) are used across the United States to help students with behavior needs that interfere with academic performance. A BIP is part of an IEP or a 504 plan (Wright et al., 2013). BIPs, IEPs, and 504 plans are legal documents that hold schools accountable for ensuring academic growth for all students. IDEA holds schools accountable for implementing evidence-based, peer-reviewed interventions for students in the school setting and making sure all students are making academic growth ([20 U.S.C. § 1414(d)(1)(A)(i)(IV)]; U.S. Department of Education, 2004; Wright, 2004).

In 1997, an amendment to the IDEA was authorized. This revision to the IDEA included new guidance for students who display problematic behaviors in the school setting. Students who demonstrate behaviors that interfere with their own learning, disrupt others' learning, and/or interfere with the teacher's ability to teach are eligible to be evaluated to receive an IEP that will address the problem behavior that impedes the learning. Behaviors intended to be addressed under this law are aggressive behaviors towards others in the building, property destruction, noncompliance, and verbal abuse (Drasgow et al., 1999). To be considered for a BIP, the student's problem behaviors need to be significantly different than their peers' behavior (Gable et al., 1998). Additionally, a child with a disability who is removed from their current placement, irrespective of whether the behavior is determined to be a manifestation of the child's disability, shall continue to receive educational services. These services shall enable the child to continue

to participate in the general education curriculum, although in another setting, and to progress toward meeting the goals set out in the child's IEP, and receive, as appropriate, a functional behavioral assessment and behavioral intervention services and modifications designed to address the behavior violation, so it does not recur ([20 U.S.C. § 1415(k)(1)(D)]; Drasgow et al., 1999).

According to the law, many steps must be followed to determine if a student is eligible to receive BIP as part of their IEP. It is important to note only 40 out of 50 states have reported they have state criteria put into place to guide the creation of a BIP (Killu et al., 2006). The first step in the process of creating a BIP is to review the student's past records. Items that could be reviewed are state tests, progress monitoring data, attendance records, classroom work, data from previous interventions, parent reported information, and any other information the school has available on the student (Wright, 2010). This information can help the IEP team better understand the student's background and past school history. This information can help the IEP team determine what other information needs to be collected to determine the student's eligibility for a BIP.

After reviewing the student's records, interviews are conducted to gather more information about the problem behavior and fill in the missing pieces, including what happens before and after the problem behavior occurs. Topographies, or the types of behaviors, are also identified. Interviews can be conducted with teachers, families, support staff, paraprofessionals, and other adults who have worked with the student (Wright, 2010). The information gathered from these interviews serves as a starting point and allows for some hypotheses about the behavior to be made (Drasgow et al., 1999).

Next, direct observations of the student are performed (Wright, 2010).

Operational definitions of the behavior can be created using observations to explain the

target behavior in observable and measurable terms (Gable et al., 1998; Drasgow et al.,

1999). Further, data are collected on the antecedents and consequences of the behaviors

(Gable et al., 1998; Drasgow et al., 1999). Patterns in behaviors, such as occurrence or

non-occurrence of behaviors, can be identified during this time. This process is called a

Functional Behavior Assessment (FBA). Resources for IEP teams are available to help

complete the FBA process in 41 out of 50 states. The most common resources include

Antecedent Behavior Consequence (ABC) charts and information to help define target

behaviors and provide insight for direct observations (Drasgow et al., 1999). Some form

of training on how to conduct an FBA is available in 18 states (Weber et al., 2005). The

process of conducting an FBA allows for improved hypotheses to be developed about the

function of the behavior. The function of the behavior refers to why the behavior is

happening and what maintains the behavior to keep it occurring. Additionally, the direct

observation can help identify under what conditions the problem behavior occurs

(Drasgow et al., 1999; Bawazeer et al., 2019). Once the direct observations have been

conducted and the function of the behavior is clear, it is time to move to the next step. If

the function of the behavior is still not clear after the direct observations, a Functional

Analysis (FA) may be performed. FA procedures test each function by systematically

manipulating antecedents and consequences. This procedure is accurate, but rigorous.

The FA is likely to evoke problem behavior; therefore, a trained professional should

conduct the FA (Drasgow et al., 1999; Bawazeer et al., 2019; OSEP Center on Positive Behavioral Interventions et al., 2000).

Baseline data also need to be collected. Baseline data will consist of behavioral observations or other data collected from the classroom to help to inform the IEP team where the student is currently functioning. The baseline data will be used to match the intervention to the function of the behavior and will be used to aid in goal formation (Drasgow et al., 1999). Additionally, the baseline data can be used to examine if an intervention is effective in reducing problem behaviors.

Once background information and baseline data are collected, an intervention must be created. Interventions that are functionally based have been shown to be effective to reduce problem behaviors when implemented with high rates of integrity (Fairbanks et al., 2007; Lane et al., 2007). Out of the 50 states, 26 reported having a standard practice of using the results of the FBA to make a hypothesis and create an intervention (Killu et al., 2006). Short-term goals and annual goals will be established to progress monitor the student's success (Drasgow et al., 1999). These goals need to be observable and measurable to determine program effectiveness (Etscheidt, 2006). The goal of the BIP is to reduce problem behaviors and teach the student socially acceptable replacement behaviors. Positive behaviors displayed by the student should be reinforced, and problem behaviors should be put on extinction (i.e., ignored). The replacement behavior should serve the same purpose as the problem behavior, so the same outcome is obtained (Gresham et al., 2004). The replacement behavior should also take less effort than the original problem behavior, so the child is more likely to choose the alternative behavior

when the antecedent is presented (Horner & Day, 1991). In a response to a survey, 29 states indicated a replacement behavior is part of their standard practice for creating a BIP (Killu et al., 2006). The main principle of the intervention plan should not be punishment or use of coercion; rather, the intervention plan should focus on positive interventions such as differential reinforcement of other behaviors, differential reinforcement of alternative behavior, differential reinforcement of low-rate behavior, functional communication training, noncontingent reinforcement, and positive attention (34 C.F.R. § 300.324(a)(2)(i); Drasgow et al., 1999; Killu et al., 2006; O'Donohue & Fisher, 2008).

In addition, the comprehensive BIP should be aimed at changing the student's environment. This involves changing the behavior of the people around the student, not just changing the student's behavior. Because the people around the student also need to change their behavior, it is important to make sure the plan is not too complex. If the plan is too complex, it will be difficult for staff to carry it out. For the plan to be legally implemented, the BIP document needs to state the modifications to the current plan and list new services that are to be provided to the student. The location where the behavior plan should be implemented should also be stated, such as in the general education setting or in other locations (Drasgow & Yell, 2001; Etscheidt, 2006). Student's BIP should be carried out in the least restrictive environment (LRE), and the LRE should be identified in the BIP. General education teachers are responsible for implementing the BIP in the general education setting. Implementation in the general education setting is more beneficial for the student (Etscheidt & Bartlett, 1999).

The information collected from the record review, interviews, and observations need to be included in the BIP document. The BIP needs to include a definition and description of the problem behavior that is being addressed. The hypothesized function of the problem behavior needs to be stated. The newly created intervention aimed at changing the student's problem behavior needs to be written out and explained in detail, including when, where, and how often the plan will be implemented. A system will be put into place to monitor and evaluate the effectiveness of the plan (Drasgow et al., 1999). The legal requirement for a plan needs to include positive, preventive, and proven interventions that are developed to address children's problem behaviors (Etscheidt & Clopton, 2008). This information will help ensure accountability for the school to implement the plan.

Once the plan is created, the student's behavior needs to be progress monitored. The IDEA reauthorization of 2004, which is the most recent reauthorization, requires progress monitoring to hold schools accountable. It also allows the IEP team to determine if the plan is appropriate for the student (Etscheidt, 2006). During progress monitoring, observable and measurable data need to be collected. The IEP team needs to determine how the data will be collected and who is responsible for collecting the data (Etscheidt & Bartlett, 1999). Other progress monitoring tools can be used to collect data such as curriculum-based measurement (CBM). In addition to reporting the progress monitoring data to the IEP, parents need to be informed of their child's progress as often as parents of general education students are notified (Etscheidt, 2006). This progress monitoring helps ensure schools are implementing the BIP to allow student success.

A BIP should be created through collaboration and consultation. Consultation, specifically surrounding problem behaviors, can be categorized as problem-solving behavioral consultation. There are three standardized interviews that have been created to address all areas of the BIP and to help ensure all areas are covered. The first interview is known as the Problem Identification Interview (PII) (Wilkinson, 2006). During this interview, the focus is on defining the problem behavior, identifying environmental conditions that contribute to the problem behavior, and establishing how the data will be collected. The next interview is the Problem Analysis Interview (PAI). During this interview, the baseline data are evaluated, an intervention plan is developed, intervention implementation occurs, implementation check-ins happen, and data are collected. Finally, there is the Treatment Evaluation Interview (TEI). This interview would take place after the BIP has been created and implemented. The TEI is used to determine the effectiveness of the intervention, examine the treatment integrity, allow performance feedback to be given, address questions and concerns, make any needed modifications to the plan, and determine next steps (Sterling-Turner et al., 2002; Wilkinson, 2006). Using these standardized interviews should be considered when creating a BIP to ensure a matched and comprehensive intervention is developed and implemented with integrity.

<div align="center">Behavior Intervention Plan Integrity</div>

An important consideration for BIPs is to monitor the integrity of the behavior intervention itself (Sanetti & Kratochwill, 2009). Monitoring implementation integrity will ensure the plan is being implemented consistently and correctly. The individual(s) implementing the plan should "self-check" by using a checklist that shows the different

steps that should be implemented (Gable et al., 1998; Sheridan et al., 2006; Wilkinson, 2007). Another individual can also observe the plan being implemented and fill out the checklist for the person implementing the plan. Recommendations state the checklist should be filled out every three to five days to ensure reliability (Gable et al., 1998). When there is a lack of integrity, problem behaviors are not being addressed appropriately, and the failure to address problem behavior is failure to ensure FAPE (Audette & Algozzine, 1992; Drasgow & Yell, 2001).

The quality of the BIP is related to the student outcomes and treatment integrity. Cook et al. (2012) longitudinally examined the quality of the BIP, student success, and teacher integrity data through questionnaires and observations. Researchers found the quality of the BIP was positively related to student outcomes both academically and behaviorally. More specifically, they found the higher quality the BIP, the more success the student displays. Additionally, Charlton et al. (2021) examined predictors on treatment integrity, and it was found that people's perceptions of the BIP quality significantly predicted the treatment integrity. Together, the quality of the BIP, treatment integrity, and student outcomes were all correlated, with treatment integrity as a mediator between the quality of the BIP and student outcomes (Cook et al., 2012). It is presumed treatment integrity influences the outcome between the quality of the BIP and student outcomes. School personnel training, BIP quality, and treatment integrity significantly affect student outcomes (Charlton et al., 2021). This highlights treatment integrity is an important aspect of behavior interventions and aids in increasing student academic success.

In addition to looking at the BIP document, intervention integrity baseline data has been gathered across many studies. Teachers with various behavior knowledge, different levels of teaching experiences, and different ages were all asked to implement behavior plans. Some of the behavior plans took place in a general education setting, while others took place in special education schools. Some behavior plans were implemented with experimenters acting as students in a controlled setting, and some were implemented in a group home setting where children received education services (Codding et al., 2005, 2008; DiGennaro-Reed et al., 2010; Hogan et al., 2015; Luna et al., 2019). When teachers were only given a written copy of a behavior plan, the treatment integrity across settings varied. Some teachers had higher integrity scores than others ranging from 0% correct implementation to 57% (Codding et al., 2008). Specific aspects of plans were implemented with higher integrity than other areas of the plan, and the plans involving differential reinforcement of other behaviors were lower in integrity, along with other more complex plans (Luna et al., 2019). Most teachers did not consistently implement the behavior plans. Most behavior plan implementation integrity did not increase with time and practice (Codding et al., 2005,2008; DiGennaro-Reed, et al., 2010; Hogan et al., 2015; Luna et al., 2019). Teachers need more support than a copy of the behavior plan to have the tools to implement the plan with high integrity.

In addition to support for school personnel on BIPs being a barrier to implementation integrity, teachers identified other barriers to BIP implementation. Collier-Meek et al. (2019) examined barriers to implementing BIPs in the classroom. It was found teachers rated managing problem behavior in general as the number one

barrier followed by remembering to implement the plan, and the last main barrier was competing responsibilities related to other activities and students. Furthermore, Robertson et al. (2020) found the most critical barrier to implementation to be the cause of student problem behavior cannot be addressed through a BIP, followed by implementation inconsistently across staff, and not being provided with adequate resources to implement the BIP. Schools that were urban, had higher percentages of students receiving free or reduced lunch, and higher percentages of minority students had more challenges related to BIP implementation, lower fidelity, and were less effective. Barriers to implementation can be caused by many factors and lead to lower integrity.

<center>Strategies to Increase Integrity</center>

Collaboration, Planning, and Goal Setting

Collaboration is one way to aid in increasing treatment integrity. Collaboration can help identify who is responsible for carrying out the intervention (Roach et al., 2014). This step is important to ensure implementation of the BIP. Collaboration can also help with developing the intervention resources and materials (Roach et al., 2014). This is important for success because some plans require certain materials. For example, an intervention requiring a token board could not be implemented without the board. During collaboration, training and coaching sessions can happen (Roach et al., 2014). Supporting teachers before they implement interventions can help them be successful.

Researchers reported 93% of teachers try to plan for an intervention before it is put into place in the classroom (Long et al., 2016). This includes interventions for both general and special education students. Additionally, 93% of teachers reported receiving

support from other staff members to assist with the implementation of interventions;
however, the amount and type of support varied based on the student's age, intensity of
need, availability of outside help, and many other factors. In this same study, teachers
reported that over 91% of the intervention plans had more than one component (Long et
al., 2016), which suggests that the intervention plans may be complex and time
consuming to implement. Additionally, when teachers were asked about the biggest
barrier for implementation, they reported the intervention itself was the biggest barrier,
providing further evidence that the plans may be complex, take a lot of time and
resources to implement, or may not be feasible in the current setting (Long et al., 2016).
The more complex the intervention, the lower the treatment integrity (Roach et al., 2014).
BIPs can be challenging for teachers to implement in the classroom, and one way to help
with this barrier is to provide training for teachers.

Sanetti et al. (2015) examined the effects of implementation planning on the
treatment integrity and quality of behavior interventions. Implementation planning
included the teacher receiving and reviewing the steps of the behavior plan and asking
questions about the plan, implementing the plan, making revisions, collaborating with a
consultant, implementing the final plan, and consulting once a week with their consultant
for questions and feedback. This allowed teachers to try the plan in the classroom, decide
if the plan was feasible, and make modifications to improve feasibility, if necessary. This
study demonstrated a 35% increase in implementation integrity compared to the baseline
of no collaboration. Additionally, DiGennaro et al. (2007) attempted to increase integrity
by asking teachers to set a behavior reduction goal for their student and implement the

plan in efforts to achieve higher treatment integrity. Teachers were given feedback on the student's behavior. This goal setting method and student outcome data led to varying levels of integrity, ranging from 0%-67% increase compared to baseline data. Neither method reached high levels of integrity, which suggests that different training may be necessary to reach higher levels of integrity (for the purpose of this literature review, high levels of integrity will be considered 85% correct implementation or higher). Future work should focus on optimal strategies for, and time devoted to, training teachers to implement behavior plans with high levels of integrity.

<u>Video Training</u>

A new way teachers are trained in the school setting is by listening to PowerPoint presentations and watching videos. Luna and colleagues (2019) taught teachers how to implement behavior interventions using this method. The teachers were then asked to implement the behavior procedures they learned from the PowerPoint and videos. This method resulted in varying rates of implementation integrity. Furthermore, digital behavior intervention plans (DBIP) are another way teachers were taught how to implement BIPs. Instruction videos were created to demonstrate how to implement a 12-step behavior plan. All teachers were able to reach 100% treatment integrity after 4 sessions and maintain 100% integrity 2 weeks after the training; however, the effectiveness of the intervention to reduce student problem behavior varied (Holcomb et al., 2020). Although this method was successful in increasing integrity for a 12-step plan, teachers need to be trained using techniques that consistently result in high integrity but that also lead to reduction of problem behaviors

DiGennaro-Reed et al. (2010) provided individualized video modeling for teachers. Teachers were given a written behavior plan and were able to ask questions about the plan before taking a test. Teachers were provided feedback on the incorrect answers from the test. Teachers then implemented the plan they had learned. Following implementation, teachers watched a video on the specific plan they were instructed to implement. Teachers then implemented the plan again. After video modeling, integrity increased to an average of 84% accuracy but with a wide range. Then, teachers watched the video model again and were provided feedback on their implementation. Following corrective feedback and video modeling, all teachers reached 100% correct integrity, and maintained 100% integrity one week after training. Video modeling alone did not reach consistent high rates of integrity, but when paired with feedback there were consistent high rates of integrity.

Feedback

While some of the previous modes of instruction to support the teacher's ability to implement behavior plans with high integrity resulted in improved implementation integrity, they did not lead to consistent results among teachers. However, there is one model of instruction that provides reliable, consistent, long-lasting, and high rates of treatment integrity. This mode of instruction is feedback. Feedback, provided in many forms, has been shown to create high rates of teachers implementing behavior plans with integrity in the range of 90-100 (DiGennaro-Reed et al., 2010; Sterling-Turner et al., 2001). Researchers have demonstrated that feedback can have long lasting effects,

including maintaining the integrity over time (Codding et al., 2005, 2008; DiGennaro et al., 2007; DiGennaro-Reed et al., 2010; Hogan et al., 2015; Madzharova et al., 2018).

One type of feedback teachers can receive after implementation of a behavior plan is called delayed feedback. Feedback is provided by a trained professional who has the ability to effectively evaluate the integrity of the plan. This can be provided daily and can be in the form of verbal or written feedback. Written feedback can be in words, charts, and graphs. At the end of the day, teachers have a meeting to talk about their intervention integrity, and they have time to ask questions. Teachers are praised for what they did correctly and are told areas they can improve. During this time, the plan can be reviewed and practiced again (DiGennaro et al., 2007). This feedback time can also be spent watching videos of correct implementation and pausing videos at steps that were implemented incorrectly. A discussion of what went wrong and how to fix the problem can occur (DiGennaro-Reed et al., 2010). Daily check-ins are one way of reaching high rates of integrity during behavior intervention implementation, and this model typically produces 100% correct implementation (DiGennaro-Reed et al., 2010). Delayed feedback can be an effective mode of training teachers to implement plans with high integrity (DiGennaro-Reed et al., 2010; Reinke et al., 2014a).

The other type of feedback teachers can receive is immediate, otherwise known as in-vivo feedback (Madzharova et al., 2018). This feedback happens in the moment, immediately after a mistake is made. Because this feedback is immediate, it is provided verbally. After behavior interventions are implemented, there is time to ask questions and to receive more extensive feedback. Another aspect of in-vivo training is the teacher can

watch a live person model the intervention and receive more opportunities to practice right after the modeling. In-vivo feedback is rigorous, and many trained professionals are needed for it to be done successfully; however, the time to train a teacher using this model is short. On average six to nine trials are needed to reach 88% or higher integrity. Practice sessions with feedback only take 60-90 minutes and span the course of one to two days on average (Madzharova et al., 2018). This method has been shown to be effective in many settings, including a general education building and a clinical setting (Artman-Meeker et al., 2017; Madzharova et al., 2018). With trained staff available to work with teachers, behavior plan implementation can reach high levels of integrity over a very short time.

Behavior intervention implementation can reach consistent, reliable, and high rates of integrity, up to 100% accuracy, in a variety of settings with the appropriate support. These settings include but are not limited to: education and residential settings, special education classrooms, public schools, and nonpublic day schools (Codding et al., 2005, 2008; DiGennaro et al., 2007; DiGennaro-Reed et al., 2010; Hogan et al., 2015; Madzharova et al., 2018). After teachers have reached 90-100% integrity in the classroom, feedback fading procedures have shown to keep rates of integrity consistent (DiGennaro et al., 2007). Teachers have been observed to maintain the high integrity ratings for up to 14 weeks after feedback was stopped. In addition to the feedback model being effective, teachers rate this model of training as very acceptable (Codding et al., 2005).

In efforts to find various ways to train teachers to implement BIPs with high integrity, many methods have been studied. The only method that consistently resulted in high integrity over time was feedback. (Artman-Meeker et al., 2017; Codding et al., 2005; Codding et al., 2008; DiGennaro et al., 2007; DiGennaro-Reed et al., 2010; Hogan et al., 2015; Madzharova et al., 2018; Reinke et al., 2014b). This research suggests there are good methods for training school personnel to implement specific behavior plans with integrity, but research is needed to examine how these school personnel are being trained on the processes and skills needed to successfully plan, create, and implement BIPs that will result in improved student behavior. Providing feedback to teachers and other school personnel working with students who display challenging behaviors requires individuals who have expertise in BIP concepts and processes and can perform integrity checks and provide feedback. To begin to understand where more training is needed surrounding the BIP process, school personnel should be asked about their perceptions of their training and current practice.

CHAPTER 3

METHODS

<u>Participants</u>

A sample of 281 school personnel employed as a school psychologist (n=104), a school social worker (n=56), a special education consultant (n=52), or a special education teacher (n=68) participated in this study. The participants were composed of 85% females, 12% males, and 3% did not answer or selected they preferred not to answer this question. Of these participants, 96% were white, 0.4% Asian, 3% Black/African American, and 1% Hispanic or Latino. To be eligible for the study, participants needed to hold one of the following job titles: school psychologist, school social worker, special education consultant, or special education teacher. Additionally, participants needed to be able to read and write in English and participate in planning for, implementing, and/or evaluating behavioral intervention plans as part of their job. Participants were recruited from one Midwestern state. In this Midwestern state, school psychologists, school social workers, and special education consultants are generally employed through Area Education Agencies (AEAs) serving local school districts in rural and urban settings. Special education teachers are employed through local education agencies or individual school districts. Because of the varying sizes of schools across the state, both small and large schools were included in this study to ensure schools with different resources were included. For this study, small schools were defined as enrollment of 322 or less students in grades nine through 11, and large schools were defined as enrollment of 322 or more students in grades nine through 11 ("IHSAA Classifications." n.d.). Districts were

randomly selected from each AEA using a map. Each AEA was split into 4 equal areas, and one school from each section was selected. Two schools from each AEA were small and two were large. Both school district and AEA personnel emails were gathered from the public school and AEA websites. A survey was sent to all special education teachers in the selected districts. Special education teachers were sampled, as there are is a larger number of special education teachers than team representatives. A census of all team representatives (school psychologists, school social workers, and special education consultants) from each of the nine Iowa AEAs were also sent the survey. The survey was sent via email to 1,431 people with a 19.63% rate of return. There was a total of 269 school psychologists sent this survey and 104 completed the survey for a response rate of 39%. A total of 211 school social workers were sent this survey and 56 completed the survey with a response rate of 27%. A response rate of 20% came from special education consultants as 254 special education consultants were sent the survey and 52 participated. Finally, 640 special education teachers were sent this survey and 68 participated with an 11% response rate.

<div align="center">Development of the Survey</div>

The survey items were initially created by using the framework and items from the Index of Training in Behavioral Instruction Practices (ITBIP) (Begeny & Martens, 2006). The current survey used some of the question stems from the ITBIP, but different response options were used, and other question stems were added to the survey. The survey was expanded to include perceptions of training and confidence in practices. All aspects of the BIP process were added to measure the perceptions of and confidence in

planning, implementing, and evaluating BIPs. The Iowa IDEA system was used to guide areas of the BIP process included in the survey (https://www.iowaidea.org/IDEA2/). O'Donohue and Fisher (2008) was used to identify additional positive behavioral supports professionals may utilize to assist students with behavior difficulties. Six categories were created based on the six major areas of BIP development (completing behavior observations, FBAs, writing behavior goals, positive behavior supports, progress monitoring, and integrity), and individual items were sorted into the category of best fit. A matrix was created with up to five question stems for each category; refer to Table 1 for the question stems. The number of items in each category varied based on their match with the question stem. For example, training for implementation of antecedents was removed because a person does not implement an antecedent for a student; rather, they observe the antecedent of the behavior. The number of questions for each category are listed in Table 2 and Table 3. Within the categories, participants recorded their perceptions of training and confidence for each of the six categories using a Likert-type scale. They were also asked to make additional comments on the BIP process.

The first part of the survey asked participants to indicate how adequate they believed their educational training was in providing a good understanding of the topic and how well their educational training prepared them to implement the component. Participants answered this section using a Likert-type scale, see Table 4 for the scale values. The second part of the survey asked participants to think about their confidence in planning, implementing, and evaluating components of a BIP. They were presented with

the six components of the BIP process and asked to indicate how confident they were for each component in planning a BIP, their confidence in implementing each component, and their confidence evaluating the efficacy of that component of a BIP. The Likert-scale for this part of the survey can also be found in Table 4.

Table 1: *Survey Question Stems*

Adequacy of Training	Confidence in Knowledge
To Understand Concepts	Planning a BIP
To Implement	Implementing a BIP
	Evaluating the Efficacy of a BIP

Note: These are the question stems used in the survey for any given item.

Table 1: *Survey Question Stems*: *Adequacy of Training Number of Questions*

Plan for a BIP		To Implement a BIP	
Category	Number of Items	Category	Number of Items
Behavior Observations	3	Behavior Observations	3
FBA	8	FBA	2
Behavior Goals	2	Behavior Goals	0
PBS	11	PBS	11
Progress Monitoring	1	Progress Monitoring	1
Integrity	5	Integrity	5

Note: The numbers respond to the number of questions were asked for each category.

Table 3: *Confidence in Knowledge Number of Questions*

To Understand Concepts		To Implement		Evaluating the Efficacy of a BIP	
Category	Number of Items	Category	Number of Items	Category	Number of Items
Behavior Observations	0	Behavior Observations	3	Behavior Observations	3
FBA	2	FBA	2	FBA	8
Behavior Goals	2	Behavior Goals	2	Behavior Goals	2
PBS	0	PBS	11	PBS	0
Progress Monitoring	1	Progress Monitoring	1	Progress Monitoring	0
Integrity	4	Integrity	4	Integrity	0

Note: The numbers respond to the number of questions were asked for each category.

Table 4: *Likert-type Scale*

Adequacy of Training		Confidence in Knowledge	
Rating	Ordinal	Rating	Ordinal
1	None	1	None
2	Poor	2	Minimal
3	Fair	3	Moderate
4	Good	4	High
5	Very Good	7	Unfamiliar
7	Unfamiliar		

Note: This is the scale participants were given to answer questions in the following areas.

Procedures

Participants received a recruiting email, and they were able to click a link if they wished to participate in the survey. Consent was obtained and participants were then directed to the survey. Data was collected using Qualtrics, and the survey took participants approximately 20 minutes to complete. One reminder email was sent one week following the initial email. The university's Institutional Review Board approved these procedures.

Data Analysis

Before analyzing the data, the data were cleaned by removing participants who chose not to participate in the study or who filled out less than 60% of the survey. Participants did not have to fill out the whole survey for the data to be useful; however, 60% completion was chosen to include data sets that were mostly completed. Table 5 shows the percent of the survey completed by participants. Descriptive analyses were used to examine the data. Frequency tables for each category and question stem were created. Responses to each of the items within each category were added together to create a sum total for each category. For Example, FBA had two items under the question stem of confidence in knowledge to understand BIP concepts. If 125 people responded "high" training for both items, the frequency of participants responding to "high" training for FBA would be 250. Percentages were calculated to represent the ratio of the number of responses at each level of the Likert-type scale for each category (i.e., items per category totaled) to total number of responses across all items and all scale levels within the category. Data were examined by comparing percentages. Only the Likert-type

questions were used for these analyses. Data from the open-ended questions were not

analyzed for this study as they were not needed to answer the research questions. The

information was collected for future research.

Table 5: Survey Completion

Percent of Survey Completed	Number of Participants
100%	231
90-99.99%	45
80-89.999%	3
70-79.999%	1
60-69.999%	1

Note: Participant's response rate was categorized based on the percentage of survey completion.

CHAPTER 4

RESULTS

With the first research question, the researcher aimed to investigate the extent to which different school personnel reported different perceptions of the adequacy of their training and their confidence in practice related to planning, implementing, and evaluating BIPs. Table 6 shows the frequency percentages for the overall perception of adequacy of training to understand and implement the various BIP processes and is separated by profession. The most common response for the overall adequacy of training across professions was "good". Special education consultants, school social workers, and special education teachers most often choose "good" while school psychologists split between reporting "good" and "very good" training. Approximately 26% of special education teachers endorsed "fair" training, while 19% of each of the other three occupations responded they received "fair" training. Table 7 shows the frequency percentages for overall confidence across the different professions related to planning, implementing, and evaluating BIPs. School psychologists responded with the greatest frequency of "high" confidence in planning, implementing, and evaluating BIPs followed by special education consultants and then school social workers. Special education teachers had the lowest response rate for "high confidence". The data suggest that various school personnel have different perceptions of their training and confidence with respect to the BIP process.

Table 6: *Frequency Percentages for Overall Adequacy of Training (Understanding and Implementing) by Profession*

Respondent Group	None	Poor	Fair	Good	Very Good	Unfamiliar
School Psychologists	4%	8%	19%	35%	34%	1%
Special Education Consultants	1%	8%	19%	39%	32%	1%
School Social Workers	11%	8%	17%	32%	31%	1%
Special Education Teachers	6%	11%	26%	34%	22%	2%

Note: The percentage is the frequency percent of responses for each Likert item.

Table 7: *Frequency Percentages for Overall Confidence (Planning, Implementing, and Evaluating) by Profession*

Respondent Group	None	Minimal	Moderate	High	Unfamiliar
School Psychologists	1%	7%	33%	58%	0%
Special Education Consultants	0%	8%	43%	47%	1%
School Social Workers	8%	9%	36%	47%	1%
Special Education Teachers	5%	14%	41%	38%	2%

Note: The percentage is the frequency percent of responses for each Likert item.

The second research question examined the extent to which special education professionals reported adequate training for understanding behavioral concepts and for implementation of those concepts. This analysis did not describe the differences between professionals but rather, described their responses as a whole group. Table 8 provides frequency percentages of the responses for each area pertaining to the adequacy of training for understanding concepts that make up the BIP process. When examining the "very good" responses from school personnel, progress monitoring had the highest percentage followed by observation, FBA, goal setting, positive behavior supports, and integrity. Table 9 provides frequency percentages of the responses for each area pertaining to the adequacy of training for implementing the concepts that make up the

BIP process. School personnel responded with "very good" most often for progress

monitoring followed in sequence by observations, FBA, positive behavior supports, and

integrity. School personnel perceptions indicate their training for understanding varied

across the different concepts, and the same holds true for their training for

implementation.

Table 8: Frequency *Percentages for Adequacy of Training for Understanding Concepts*

Category	None	Poor	Fair	Good	Very Good	Unfamiliar
Behavior Observations	3%	3%	19%	33%	39%	2%
FBA	3%	8%	17%	33%	37%	1%
Writing Behavior Goals	3%	6%	19%	39%	32%	0%
Positive Behavior Support	4%	9%	21%	36%	30%	1%
Progress Monitoring	4%	4%	15%	32%	45%	0%
Integrity	8%	10%	21%	34%	26%	2%

Note: The percentage is the frequency percent of responses for each Likert item.

Table 9: *Frequency Percentages for Adequacy of Training for Implementation*

Category	None	Poor	Fair	Good	Very Good	Unfamiliar
Behavior Observations	3%	6%	18%	35%	37%	2%
FBA	5%	7%	17%	38%	32%	1%
Positive Behavior Support	5%	10%	22%	37%	25%	1%
Progress Monitoring	5%	5%	14%	34%	42%	0%
Integrity	9%	12%	23%	34%	21%	2%

Note: The percentage is the frequency percent of responses for each Likert item.

The extent to which special education professionals reported adequate training for

understanding behavioral concepts and for implementation of those concepts was further

examined by disaggregating the responses across each profession. Table 10 shows the

frequency percentages for adequacy of training to understand concepts broken down by profession. When examining "very good" training for understanding concepts, school psychologists had the highest frequency percentage for behavior observations, functional behavior assessment, and integrity. School psychologists and special education consultants tied for the highest frequency percentage for "very good" training for understanding concepts surrounding positive behavior supports. Special education consultants had the highest frequency percentage for "very good" training in writing behavior goals and progress monitoring. Table 11 shows the frequency percentages for the perceptions of adequacy of training to implement different aspects of the BIP process. When examining "very good" training for implementation, school psychologists had the highest frequency percentages in the area of behavior observations. School psychologists and school social workers reported similar perceptions for FBA. Positive behavior supports and progress monitoring was highest for special education consultants. School social workers had the highest frequency percentage for integrity. Various school personnel had the highest frequency percentages for different concepts when examining "very good training"; however, in no case did special education teachers have the highest frequency percentage compared to the other professionals.

Table 10: Frequency *Percentages for Adequacy of Training for Understanding Concepts by Profession*

	None	Poor	Fair	Good	Very Good	Unfam
Behavior Observations						
School Psychologists	1%	3%	10%	31%	55%	1%
Special Education Consultants	0%	4%	23%	35%	38%	1%
School Social Workers	8%	3%	15%	35%	37%	3%
Special Education Teachers	5%	2%	36%	35%	17%	7%
Functional Behavior Assessment						
School Psychologists	2%	7%	15%	32%	45%	0%
Special Education Consultants	0%	9%	15%	43%	32%	1%
School Social Workers	9%	5%	13%	32%	37%	3%
Special Education Teachers	4%	12%	26%	29%	28%	1%
Writing Behavior Goals						
School Psychologists	2%	8%	21%	41%	29%	0%
Special Education Consultants	0%	4%	13%	38%	43%	1%
School Social Workers	8%	6%	17%	32%	37%	0%
Special Education Teachers	4%	7%	24%	40%	26%	0%
Positive Behavior Supports						
School Psychologists	2%	8%	21%	35%	33%	1%
Special Education Consultants	1%	11%	17%	37%	33%	0%
School Social Workers	11%	8%	21%	32%	27%	1%
Special Education Teachers	4%	10%	22%	39%	25%	1%
Progress Monitoring						
School Psychologists	1%	3%	13%	30%	53%	0%
Special Education Consultants	0%	2%	10%	31%	57%	0%
School Social Workers	13%	4%	18%	27%	38%	0%
Special Education Teachers	4%	6%	18%	41%	31%	0%
Integrity						
School Psychologists	10%	8%	22%	44%	17%	0%
Special Education Consultants	2%	6%	25%	42%	23%	2%
School Social Workers	13%	5%	16%	34%	30%	2%
Special Education Teachers	9%	22%	25%	25%	16%	3%

Note: The percentages are based on frequencies from each category.

Table 11: *Frequency Percentages for Adequacy of Training for Implementation* by Profession

---

	None	Poor	Fair	Good	Very Good	Unfam
Behavior Observations						
School Psychologists	1%	2%	13%	36%	48%	1%
Special Education Consultants	1%	4%	20%	39%	35%	1%
School Social Workers	10%	5%	14%	32%	37%	2%
Special Education Teachers	3%	13%	29%	32%	21%	3%
Functional Behavior Assessment						
School Psychologists	2%	5%	18%	37%	38%	0%
Special Education Consultants	1%	6%	14%	49%	30%	0%
School Social Workers	11%	6%	9%	33%	38%	3%
Special Education Teachers	8%	11%	26%	35%	20%	0%
Positive Behavior Supports						
School Psychologists	4%	10%	21%	38%	26%	1%
Special Education Consultants	0%	10%	21%	39%	29%	1%
School Social Workers	11%	9%	21%	33%	25%	1%
Special Education Teachers	5%	10%	26%	37%	22%	1%
Progress Monitoring						
School Psychologists	2%	7%	11%	33%	47%	0%
Special Education Consultants	0%	4%	14%	27%	55%	0%
School Social Workers	14%	7%	13%	23%	43%	0%
Special Education Teachers	4%	3%	19%	49%	25%	0%
Integrity						
School Psychologists	9%	11%	21%	38%	22%	0%
Special Education Consultants	1%	9%	28%	36%	24%	3%
School Social Workers	13%	10%	14%	33%	28%	3%
Special Education Teachers	11%	17%	30%	27%	12%	3%

Note: The percentages are based on frequencies from each category.

The final research question explored school personnel's confidence in their knowledge of planning, implementing, and evaluating BIPs. Table 12 provides frequency percentages of the responses for each content area pertaining to personal confidence in

knowledge to plan for BIPs. School personnel reported highest levels of confidence in knowledge of progress monitoring, then goal writing, followed by FBA and integrity. Table 13 provides frequency percentages of the responses for each content area pertaining to confidence in the ability to correctly implement various BIP elements. Again, school personnel reported the highest levels of confidence in their knowledge of implementing progress monitoring followed by observations. FBA and goal writing were next, as they shared the same frequency. Positive behavior supports were second to lowest, with integrity being the lowest frequency. Finally, Table 14 provides frequency percentages of the responses for each content area pertaining to personal confidence in their ability to evaluate the efficacy of BIPs. When examining school personnel's "high" confidence in their knowledge to correctly evaluate the efficacy of various behavior concepts, the highest frequency was for FBA followed by goal writing, and finally, observations. School personnel rated progress monitoring to be the highest for confidence and knowledge in planning for BIPs along with confidence in implementation. The integrity category was rated the lowest for confidence in knowledge for both planning and implementation.

Table 12: *Frequency Percentages for Confidence in Knowledge of Planning*

Category	None	Minimal	Moderate	High	Unfamiliar
FBA	3%	7%	37%	52%	0%
Writing Behavior Goals	2%	6%	37%	55%	0%
Progress Monitoring	2%	5%	28%	65%	0%
Integrity	5%	12%	41%	41%	1%

Note: The percentage is the frequency percent of responses for each Likert item.

Table 13: *Frequency Percentages for Confidence in Knowledge of Implementation*

Category	None	Minimal	Moderate	High	Unfamiliar
Behavior Observations	3%	6%	34%	54%	3%
FBA	3%	8%	35%	53%	1%
Writing Behavior Goals	2%	7%	38%	53%	0%
Positive Behavior supports	3%	10%	38%	48%	1%
Progress Monitoring	2%	5%	31%	62%	0%
Integrity	6%	13%	40%	40%	1%

Note: The percentage is the frequency percent of responses for each Likert item.

Table 14: *Frequency and Percentages for Confidence in Knowledge of Evaluating BIPs*

Category	None	Minimal	Moderate	High	Unfamiliar
Behavior Observations	3%	11%	38%	45%	3%
FBA	3%	9%	37%	50%	0%
Writing Behavior Goals	3%	9%	39%	49%	0%

Note: The percentage is the frequency percent of responses for each Likert item.

Lastly, school personnel confidence in their knowledge of planning, implementing, and evaluating BIPs was examined across each separate profession. Table 15 shows each profession's frequency percentages for their confidence in knowledge to plan for BIPs. School psychologists had the highest frequency percentage for "high" confidence in knowledge to plan for FBA, writing behavior goals, progress monitoring, and integrity. Table 16 provides frequency percentages of the responses for each content area pertaining to confidence in the ability to correctly implement various BIP elements across each profession. School psychologists had the highest frequency percentage for "high" confidence in knowledge for implementation in the areas of behavior observations, FBA, writing behavior goals, positive behavior supports, progress monitoring, and integrity. Table 17 provides frequency percentages of the responses for

each content area pertaining to confidence in their ability to evaluate the efficacy of BIPs across each profession. When examining the "high" confidence, school psychologists had the highest frequency percentage for behavior observations, FBA, and writing behavior goals. Overall, school psychologists had the highest frequency percentage for all categories when examining "high" confidence in their knowledge to plan, implement, and evaluate a BIP.

Table 15: *Frequency Percentages for Confidence in Knowledge of Planning by Profession*

	None	Minimal	Moderate	High	Unfam
Functional Behavior Assessment					
School Psychologists	0%	2%	29%	69%	0%
Special Education Consultants	0%	9%	45%	46%	0%
School Social Workers	7%	6%	28%	57%	2%
Special Education Teachers	8%	14%	50%	27%	0%
Writing Behavior Goals					
School Psychologists	0%	6%	34%	60%	0%
Special Education Consultants	0%	3%	38%	58%	1%
School Social Workers	7%	6%	37%	49%	0%
Special Education Teachers	1%	9%	40%	50%	0%
Progress Monitoring					
School Psychologists	0%	1%	24%	75%	0%
Special Education Consultants	0%	6%	21%	73%	0%
School Social Workers	7%	6%	31%	56%	0%
Special Education Teachers	1%	9%	37%	52%	0%
Integrity					
School Psychologists	3%	9%	36%	52%	0%
Special Education Consultants	1%	10%	49%	38%	2%
School Social Workers	8%	11%	36%	44%	1%
Special Education Teachers	8%	20%	47%	23%	2%

Note: The percentages are based on frequencies from each category.

Table 16: *Frequency Percentages for Confidence in Knowledge of Implementation* by Profession

----

	None	Minimal	Moderate	High	Unfam
Behavior Observations					
School Psychologists	0%	3%	27%	69%	0%
Special Education Consultants	1%	5%	39%	52%	3%
School Social Workers	8%	8%	33%	48%	4%
Special Education Teachers	6%	10%	39%	37%	7%
Functional Behavior Assessment					
School Psychologists	1%	4%	30%	65%	0%
Special Education Consultants	0%	10%	37%	52%	2%
School Social Workers	7%	5%	30%	56%	1%
Special Education Teachers	5%	16%	44%	35%	0%
Writing Behavior Goals					
School Psychologists	0%	8%	32%	60%	0%
Special Education Consultants	0%	5%	38%	57%	1%
School Social Workers	7%	7%	41%	45%	0%
Special Education Teachers	2%	8%	44%	47%	0%
Positive Behavior Supports					
School Psychologists	2%	9%	34%	54%	0%
Special Education Consultants	0%	10%	40%	49%	0%
School Social Workers	8%	9%	40%	42%	1%
Special Education Teachers	3%	13%	38%	44%	1%
Progress Monitoring					
School Psychologists	0%	2%	25%	72%	0%
Special Education Consultants	0%	5%	32%	63%	0%
School Social Workers	7%	4%	33%	56%	0%
Special Education Teachers	1%	10%	37%	51%	0%
Integrity					
School Psychologists	5%	10%	36%	49%	0%
Special Education Consultants	2%	11%	46%	40%	2%
School Social Workers	7%	11%	33%	45%	3%
Special Education Teachers	10%	19%	48%	21%	2%

Note: The percentages are based on frequencies from each category.

Table 17: *Frequency and Percentages for Confidence in Knowledge of Evaluating BIPs by Profession*

	None	Minimal	Moderate	High	Unfam
Behavior Observations					
School Psychologists	1%	6%	35%	57%	0%
Special Education Consultants	0%	8%	52%	38%	3%
School Social Workers	8%	13%	35%	42%	3%
Special Education Teachers	4%	19%	32%	37%	7%
Functional Behavior Assessment					
School Psychologists	1%	5%	34%	60%	0%
Special Education Consultants	0%	12%	41%	45%	2%
School Social Workers	8%	6%	34%	52%	0%
Special Education Teachers	4%	18%	42%	36%	0%
Writing Behavior Goals					
School Psychologists	1%	9%	35%	54%	0%
Special Education Consultants	0%	3%	49%	47%	1%
School Social Workers	7%	10%	35%	48%	0%
Special Education Teachers	3%	14%	39%	44%	0%

Note: The percentages are based on frequencies from each category.

CHAPTER 5

DISCUSSION

A primary purpose of the present research was to identify differences in how various school personnel perceive the adequacy of their training and confidence in their practice surrounding BIPs. This research also examined school personnel perceptions of the adequacy of their training for understanding behavioral concepts and for implementing various BIP processes and procedures. Finally, this research addressed how confident school personnel are in their knowledge of various behavioral concepts and skills needed for planning, implementing, and evaluating efficacy of BIPs.

School personnel of different training backgrounds reported varying levels of confidence and knowledge when it comes to the BIP process. School psychologists reported the highest perception of training adequacy compared to other school personnel, with ratings of "good" and very good". School psychologists also had the highest frequency of responses for "high" confidence in planning, implementing, and evaluating BIPs. Special education teachers had the lowest ratings for both training and confidence in knowledge surrounding the BIP process. Across all school personnel, confidence for planning and preparing for BIPs was rated highest for progress monitoring and lowest for integrity. School personnel rated the highest area of training for implementation as progress monitoring with the lowest being integrity. School personnel rated progress monitoring to be the highest for confidence and knowledge across planning and implementing BIPs. When examining school personnel knowledge and confidence

around being able to correctly evaluate the efficacy of different behavioral concepts and skills, the area that was rated of highest confidence was FBA.

Based on the school psychologists' perceptions, they reported having the most training and knowledge around BIPs, while special education teachers reported the lowest. Special education consultants and school social workers fell into the middle. School psychologists hold Ed.S. or Ph.D. degrees, meaning their formal training consists of more credit hours than a master's program. School psychologists are required to complete 60 graduate credit hours of coursework and a year-long supervised internship to obtain their specialist degree (National Association of School Psychologists, 2010). According to the National Association of Social Workers (2022), school social workers are required to hold a master's degree and have 2 years of supervised experience practicing in the school setting. Special education consultants need a master's degree in special education or a master's degree in another area of education plus an endorsement in at least one special education instructional area. Additionally, special education consultants must have four years of successful teaching experience, two of which must be in special education (Iowa Admin. Code r. 282-15.2). Special education teachers can hold a bachelors or a master's degree (Oliver & Reschly, 2010).

In addition to the varying degree requirements, content that is taught in formal training programs is likely different. School psychologists are trained in ten domains of professional practice during their graduate training. Out of the ten domains, nine of the domains are related to the BIP process. The BIP process relates to Data-Based Decision Making and Accountability because it teaches school psychologist to use data to

determine the effectiveness of the intervention. Training in Consultation and Collaboration builds skills for planning for, implementing and evaluating the BIPs while working with school personnel, Interventions and Instructional Support to Develop Academic Skills, Mental and Behavioral Health Services and Intervention promotes learning of different behavioral principals, and Equitable Practices for Diverse Student Populations ensures the BIP is appropriate for all populations. Furthermore, the domain in Research and Evidence-Based Practice provides training on choosing effective interventions and Legal, Ethical, and Professional Practice provides training around the legal implications of BIPs and also provides guidance on considerations when choosing interventions for diverse populations (National Association of School Psychologists, 2010). The domains school psychologists are trained in are closely aligned with the BIP process.

School social workers are trained in 11 standards, 9 of which relate to the BIP process. Ethics and Values relate to the BIP process by supporting pre-service school social workers in their learning in positive behavioral support instead of punishment. Assessment learning helps school social workers be able to take behavioral data and determine the functions of behavior and Intervention learning aids in plan development. The standard Decision Making and Practice Evaluation allows for training in efficacy evaluation, while Record Keeping helps with the record review process when evaluating a student. Training around Professional Development helps school social workers learn the importance of continuous learning and staying up to date on current research. Cultural Competence allows for appropriate interventions for all students. The Interdisciplinary

Leadership and Collaboration standard aids the collaboration process when it comes to planning, implementing, and evaluating BIPs with school personnel. Finally, Advocacy training will allow for school social workers to put the best plans into place in the setting that is most appropriate for students. (National Association of School Social Workers, 2012).

Special education consultants are required to have training in 10 domains, 5 of which can be applied to the BIP process. The 5 domains include Curriculum Development Design that allows special education consultants to learn how to plan for a BIP by putting together an intervention. The Consultation Process in Special or Regular Education helps special education consultants learn to work with other school personnel during the whole BIP process. The domain Interpersonal Influence teaches the importance of knowing the relationships between people and using those relationships strategically when completing the BIP process, whereas Conducting Needs Assessments provides training around finding the students need areas. Lastly, Evaluating In-Service Sessions provides insight on evaluating efficacy (Iowa Admin. Code r. 282-15.2). These domains ensure some training around the BIP process for special education consultants.

School phycologist, school social workers, and special education consultants have domains and standards to be trained in while earning their degree. Special education teachers rarely have a whole course related to behavior management during their training, rather they are taught some behavior management strategies throughout the courses they take (Oliver & Reschly, 2010). There are less associations with special education training programs and the BIP process. The perceptions around training and knowledge across the

various professionals in the current project matched the amount of training offered through graduate training programs for each profession.

School psychologists receive the most formal training in their graduate programs due to the requirements of their degree. Across the United States, school psychologists, school social workers, and school counselors are all employed as school mental health professionals (National Association of School Psychologists, 2021). Special education consultants are educational and behavioral health professionals (Central Rivers Area Education Agency, 2022; Keystone Area Education Agency 2022). BIPs fall into the categories of mental and behavioral health. Different school personnel with various training backgrounds are asked to help with planning, implementing, and evaluating BIPs. The results of this study suggest there is a range of knowledge and confidence surrounding BIPs across the various school personnel. Based on the data, more training should be provided to special education consultants, school social workers, and special education teachers in the areas of BIPs. Training is important as it can help boost knowledge of challenging behaviors, which is important because problem behaviors interfere with academic performance (Henricsson & Rydell, 2006; Van Oorsouw et al., 2010).) To help increase positive student outcomes, more training would help to ensure integrity of implementation in all areas of the BIP process (DiGennaro et al., 2007; Fryling et al., 2012). To reach the highest rate of integrity, training should include feedback as it is the most effective way to reach high rates of integrity and maintain high rates over time (Codding et al., 2005, 2008; DiGennaro et al., 2007; DiGennaro-Reed et al., 2010; Hogan et al., 2015; Madzharova et al., 2018; Sterling-Turner et al., 2001).

Furthermore, special education teachers consistently reported having the least amount of training and knowledge of the BIP process compared to the other school personnel. This is problematic because they are often the professionals expected to directly implement BIPs in their classrooms and work daily with students who have intense behavior needs. Special education teachers can be asked to help with the whole BIP process, which includes collecting observational and FBA data, writing behavior goals, developing and implementing a comprehensive behavior plan with positive behavior supports, progress monitoring, and ensuring integrity. Teacher training programs should re-examine program requirements to ensure teachers are receiving proper training of the BIP process. Without this training, it will be difficult for teachers to plan, implement, and evaluate plans to help students with challenging behaviors (Robertson et al., 2020). When teachers do not understand the BIP process, it is almost impossible for them to be able to complete the BIP process with integrity, meaning the BIP will be less effective (Wilder et al., 2006). When plans are not implemented in the way they are intended to be implemented, problem behaviors are not addressed. Not addressing problem behaviors means students are not getting the services they need to access their education (Audette & Algozzine, 1992; Drasgow & Yell, 2001).

Another pattern that emerged from the data was the consistently low ratings for both knowledge of how to plan for integrity checks along with personnel reporting they have little training to evaluate the integrity of a BIP. This is problematic because without integrity, the effectiveness of the intervention is unknown, and it cannot be determined if the behavior change, or lack of behavior change, is due to the intervention or other

factors (Bellg et al., 2004). Additionally, plans implemented with higher integrity produce better results, meaning fewer problem behaviors (Cook et al., 2012; DiGennaro et al., 2007; Fryling et al., 2012). High rates of integrity also result in increased appropriate replacement behaviors (Pipkin et al., 2010). Plans need to be implemented with high integrity to ensure FAPE for students (Audette & Algozzine, 1992; Drasgow & Yell, 2001). In a court case involving Calvert County Public School District, the judge determined that the school failed to implement a behavior plan for a student, and this failure to implement the behavior plan was a denial of a child's right to FAPE (Calvert County Public Schools, 2019).

There is not a standard practice across the United States for teams to perform integrity checks. The laws are explicit about ensuring integrity, but there is no language within the law that details criteria for when and how integrity checks should occur in the school setting. School personnel rated this area low in the survey. Low accountability provided by the law along with low ratings among school personnel regarding confidence and knowledge are alarming. If people are not held accountable to perform integrity checks, they might not perform the checks or do so rarely. Furthermore, when people are not knowledgeable about integrity checks they may not be performed correctly. To ensure completion, integrity checks need more attention and, potentially, accountability regulations from government agencies. Additionally, more training for school personnel needs to be provided by training programs and employers to increase skills and confidence in evaluating BIP integrity. Increasing regulations, training, and knowledge surrounding integrity for school personnel could help enhance the frequency and

accuracy of integrity checks in the school setting leading to improved BIP integrity and potentially improved student behavior (Cook et al., 2012; DiGennaro et al., 2007; Fryling et al., 2012).

School personnel also rated training for understanding and implementing positive behavior support as low. This is concerning because the law requires BIPs to include positive, preventive, and proven interventions to address children's problem behaviors (§ 300.34(c)(10)(iv); Etscheidt & Clopton, 2008). In addition to the laws put in place for positive behavior supports, implementing positive behavior supports is an effective way to reduce problematic behaviors (MacDonald et al., 2018). However, it would be difficult for school personnel to write an individualized, comprehensive BIP that meets the needs of each student if the knowledge of various positive behavior intervention strategies is low. More training is needed for all school personnel who are working with students who require BIPs. Training teachers in behavior principles and providing them with high quality training on a variety of positive behavioral interventions would be beneficial. This training would allow for more comprehensive plans to be created to match students' needs (Van Oorsouw et al., 2010). Furthermore, when teachers attend more trainings and are able to implement a program with high integrity, there are more positive student outcomes (Reyes et al., 2012). When teachers have more training, students are more likely to have individualized plans implemented with integrity, to experience decreased problem behaviors, and experience better outcomes (Charlton et al., 2021; MacDonald et al., 2018; Van Oorsouw et al., 2010).

Limitations

      There are several limitations to the present study. First, some school professionals were excluded from the study. School counselors, general education teachers, and paraeducators were not included; however, these professionals do support students who have BIPs. Future research should include these professionals to gain a better understanding of their knowledge and confidence around BIPs. Second, these results were based on peoples' perceptions and did not examine their formal training. A survey of course syllabi across undergraduate and graduate programs would provide direct assessment of the knowledge and skills taught to school personnel in their undergraduate and graduate training programs. Additionally, in-service training opportunities should be examined because school personnel do not stop learning when they graduate from undergraduate and graduate programs. State licensing boards require continuing education credits to remain licensed. Professionals earn these credits both through employer provided in-service training and through a variety of community and online opportunities for training. Another limitation to this study was the differing response rates across various school personnel. School psychologists were overrepresented in this study compared to special education teachers. This may lead to a bias in the comparison of their self-reported confidence and knowledge. There is potential for response bias from non-responders, and those who responded to the survey may have different perceptions compared to those who did not respond. The final limitation was that only people who work in one Midwestern state were included in the

study. Future research should examine professionals in multiple states across the United States to examine patterns of school personnel perceptions around BIPs.

Conclusion

Laws and regulations surrounding BIPs are established, methods to improve integrity are known, and barriers to BIP implementation have been studied ([20 U.S.C. § 1415(k)(1)(D)]; Calvert County Public Schools, 2019; Codding et al., 2005, 2008; Collier-Meek et al., 2019; DiGennaro et al., 2007; DiGennaro-Reed et al., 2010; Drasgow et al., 1999; Hogan et al., 2015; Madzharova et al., 2018; Robertson et al., 2020). Prior to the present study, perceptions of school personnel training and knowledge had not been examined. This research study examined school psychologists, school social workers, special education consultants, and special education teachers' perceptions of their training and their knowledge of six aspects of the BIP process (completing behavior observations, concepts around FBAs, writing behavior goals, positive behavior supports, progress monitoring, and integrity). While there were differences in perceived adequacy of training and confidence in understanding, overall, most school personnel rated progress monitoring as an area of strength and integrity as an area in need of improvement. Results from this study can be used to inform future training programs, both during pre-service training and throughout employment. Future research should study the experiences of additional school personnel who work with students who display challenging behaviors. This would broaden the scope of perceptions around training and knowledge and provided even more data to support future courses taught to school personnel.

Increasing teacher training of the BIP process is imperative to help students succeed. Plans implemented with high integrity are more effective in reducing problem behaviors and increasing appropriate replacement behaviors. (DiGennaro et al., 2007; Fryling et al., 2012; Pipkin et al., 2010). When plans are not implemented with high integrity, they are not as effective in reducing problem behaviors (Pipkin et al., 2010). Students who need BIPs implemented with high integrity are typically students who are labeled with ED or ASD (National Center for Education Statistics, 2022). The long-term outcomes for students with ED indicate individuals in this category tend to have low employment rates and high criminal justice system involvement (Wagner & Newman, 2012). Schools must improve their support of this group of students to help set them up for more successful futures. Creating quality BIPs and implementing them with high integrity is one place to start.

REFERENCES

Artman-Meeker, K., Rosenberg, N., Badgett, N., Yang, X., & Penney, A. (2017). The effects of bug-in-ear coaching on pre-service behavior analysts' use of functional communication training. *Behavior Analysis in Practice*, *10*(3), 228–241. https://doi.org/10.1007/s40617-016-0166-4

Audette, B., & Algozzine, B. (1992). Free and appropriate education for all students: Total quality and the transformation of American public education. *Remedial and Special Education, 13*(6), 8-18. https://doi.org/10.1177/074193259201300605

Bawazeer, A., Alhammadi, M., & Kelly, M. (2019). Functional behavior assessment for challenging behavior in individuals with Autism. *Frontiers in Human Neuroscience, 13*. https://doi.org/10.3389/conf.fnhum.2019.229.00027

Begeny, J. C., & Martens, B. K. (2006). Assessing pre-service teachers' training in empirically-validated behavioral instruction practices. *School Psychology Quarterly, 21*(3), 262. https://doi.org/10.1521/scpq.2006.21.3.262

Bellg, A. J., Borrelli, B., Resnick, B., Hecht, J., Minicucci, D. S., Ory, M., Ogedegbe, G., Orwig, D., Ernst, D., & Czajkowski, S. (2004). Enhancing treatment fidelity in health behavior change studies. *Health Psychology, 23*(5), 443–451. https://doi.org/10.1037/0278-6133.23.5.443

Calvert County Public Schools, 74 IDELR 301 (SEA MD 2019).

Central Rivers Area Education Agency. (n.d). *Team representatives*. Central Rivers Area Education Agency. https://www.centralriversaea.org/special-education/student-family-services/team-representatives/

Charlton, C. T., Rigby, D. M. G., Moulton, S. E., Sabey, C. V., & Richardson, M. J. (2021). Implementing behavior intervention plans in schools: A pilot study of the complex relationship between technical adequacy, treatment integrity, and student outcomes. *Journal of Behavioral Education*, 1-22. https://doi.org/10.1007/s10864-021-09448-z

Codding, R. S., Feinberg, A. B., Dunn, E. K., & Pace, G. M. (2005). Effects of immediate performance feedback on implementation of behavior support plans. *Journal of Applied Behavior Analysis, 38*(2), 205-219. https://doi.org/10.1901/jaba.2005.98-04

Codding, R. S., Livanis, A., Pace, G. M., & Vaca, L. (2008). Using performance feedback to improve treatment integrity of classwide behavior plans: An investigation of observer reactivity. *Journal of Applied Behavior Analysis, 41*(3), 417-422. https://doi.org/10.1901/jaba.2008.41-417

Collier-Meek, M. A., Sanetti, L. M., & Boyle, A. M. (2019). Barriers to implementing classroom management and behavior support plans: An exploratory investigation. *Psychology in the Schools, 56*(1), 5-17. https://doi.org/10.1002/pits.22127

Cook, C. R., Mayer, G. R., Wright, D. B., Kraemer, B., Wallace, M. D., Dart, E., Collins, T., & Restori, A. (2012). Exploring the link among behavior intervention plans, treatment integrity, and student outcomes under natural educational conditions. *Journal of Special Education, 46*(1), 3–16 https://doi.org/10.1177/0022466910369941

Development, Review, and Revision of the IEP, 34 C.F.R. § 300.324(a)(2)(i)

DiGennaro-Reed, F. D., Codding, R., Catania, C. N., & MaGuire, H. (2010). Effects of video modeling on treatment integrity of behavioral interventions. *Journal of Applied Behavior Analysis, 43*, 291–295. https://doi.org/10.1901/jaba.2010.43-291

DiGennaro, F. D., Martens, B. K., & Kleinmann, A. E. (2007). A comparison of performance feedback procedures on teachers' treatment implementation integrity and students' inappropriate behavior in special education classrooms. *Journal of Applied Behavior Analysis, 40*(3), 447-461. https://doi.org/10.1901/jaba.2007.40-447

Drasgow, E., & Yell, M. L. (2001). Functional behavioral assessments: Legal requirements and challenges. *School Psychology Review, 30*(2), 239-25. https://doi.org/10.1080/02796015.2001.12086112

Drasgow, E., Yell, M. L., Bradley, R., & Shriner, J. G. (1999). The IDEA amendments of 1997: A school-wide model for conducting functional behavioral assessments and developing behavior intervention plans. *Education and Treatment of Children*, 244-266. http://www.jstor.org/stable/42899573

Etscheidt, S. K. (2006). Progress monitoring: Legal issues and recommendations for IEP teams. *Teaching Exceptional Children, 38*(3), 56-60. https://doi.org/10.1177/004005990603800308

Etscheidt, S. K., & Bartlett, L. (1999). The IDEA amendments: A four-step approach for determining supplementary aids and services. *Exceptional Children, 65*(2),163174. https://doi.org/10.1177/001440299906500202

Etscheidt, S., & Clopton, K. (2008). *Behavioral intervention plans.* In E. Grigorenko (Ed.), *Educating individuals with disabilities: IDEIA 2004 and beyond*. New York: Springer Publishing Company.

Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Exceptional Children, 73*(3), 288-310. https://doi.org/10.1177/001440290707300302

Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher preparation programs. *Teacher Education and Special Education, 37*(2), 106-120. https://doi.org/10.1177/0888406413507002

Fryling, M. J., Wallace, M. D., & Yassine, J. N. (2012). Impact of treatment integrity on intervention effectiveness. *Journal of Applied Behavior Analysis, 45*(2), 449-453. https://doi.org/10.1901/jaba.2012.45-449

Gable, R. A., Quinn, M. M., Rutherford, R. B., Jr, & Howell, K. (1998). Addressing problem behaviors in schools: Use of functional assessments and behavior intervention plans. Preventing School Failure. *Alternative Education for Children and Youth, 42*(3), 06-119. https://doi.org/10.1080/10459889809603178

Gresham, F. M., Mcintyre, L. L., Olson-Tinker, H., Dolstra, L., Mclaughlin, V., & Van, M. (2004). Relevance of functional behavioral assessment research for school-based intervention and positive behavioral support. *Research in Developmental Disabilities, 25*(1), 19-37. https://doi.org/10.1016/j.ridd.2003.04.003

Guntersville City Bd. of Educ., 47 IDELR 83 (SEA AL 2006)

Henricsson, L., & Rydell, A. M. (2006). Children with behaviour problems: The influence of social competence and social relations on problem stability, school achievement and peer acceptance across the first six years of school. *Infant and Child Development, 15*(4), 347-366. https://doi.org/10.1002/icd.448

Hirsch, S. E., Bruhn, A. L., Lloyd, J. W., & Katsiyannis, A. (2017). FBAs and BIPs: Avoiding and addressing four common challenges related to fidelity. *Teaching Exceptional Children, 49*(6), 369–379. https://doi.org/10.1177%2F0040059917711696

Hogan, A., Knez, N., & Kahng, S. (2015). Evaluating the use of behavioral skills training to improve school staffs' implementation of behavior intervention plans. *Journal of Behavioral Education, 24*(2), 242–254. https://doi.org/10.1007/s10864-014-9213-9

Holcomb, C., Baker, J. N., & More, C. (2020). Digital behavior intervention plans: Effects on general education teacher fidelity of implementation. *Journal of Special Education Technology, 35*(3), 155-166. https://doi.org/10.1177/0162643419854502

Horner, R. H., & Day, H. M. (1991). The effects of response efficiency on functionally equivalent competing behaviors. *Journal of Applied Behavior Analysis, 24*(4), 719-732. https://doi.org/10.1901/jaba.1991.24-719

Iowa High School Athletic Association. (n.d.). *IHSAA classifications.* https://www.iahsaa.org/classifications/

Individuals with Disabilities Education Improvement Act (IDEA) (2004), 20 U.S.C. § 1401 et seq.

Individuals with Disabilities Education Improvement Act (IDEA) (2017), § 300.34(c)(10)(iv)

Iowa Admin. Code r. 282-15.2

Keystone Area Education Agency. (2022). *Core team representative.* Keystone Area Education Agency. https://drive.google.com/file/d/1ytmO1M4Ibd_tjXtlDfUaBPQNFHRDW1lP/view

Killu, K., Weber, K. P., Derby, K. M., & Barretto, A. (2006). Behavior intervention planning and implementation of positive behavioral support plans: An examination of states' adherence to standards for practice. *Journal of Positive Behavior Interventions, 8*(4), 195-200. https://doi.org/10.1177/10983007060080040201

Lane, K. L., Rogers, L. A., Parks, R. J., & Weisenbach, J. L. (2007). Function-based interventions for students who are nonresponsive to primary and secondary prevention efforts: Illustrations at the elementary and middle school levels. *Journal of Emotional and Behavioral Disorders*, *15*(3), 169. https://doi.org/10.1177/10634266070150030401

Long, A. C., Sanetti, L. M. H., Collier-Meek, M. A., Gallucci, J., Altschaefl, M., & Kratochwill, T. R. (2016). An exploratory investigation of teachers' intervention planning and perceived implementation barriers. *Journal of School Psychology*, *55*, 1-26. https://doi.org/10.1016/j.jsp.2015.12.002

Luna, O., Nuhu, N. N., Palmier, J., Brestan-Knight, E., & Rapp, J. T. (2019). Using a self-instructional package to train groups to implement reinforcement strategies. *Journal of Behavioral Education, 28*(3), 389-407. https://doi.org/10.1007/s10864-018-09319-0

MacDonald, A., McGill, P., & Murphy, G. (2018). An evaluation of staff training in positive behavioural support. *Journal of Applied Research in Intellectual Disabilities, 31*(6), 1046–1061. https://doi.org/10.1111/jar.12460

Madzharova, M. S., Sturmey, P., & Yoo, J. H. (2018). Using in-vivo modeling and feedback to teach classroom staff to implement a complex behavior intervention plan. *Journal of Developmental and Physical Disabilities, 30*(3), 329 337. https://doi.org/10.1007/s10882-018-9588-y

National Association of School Psychologists. (2010). *Standards for the credentialing of school psychologists*. National Association of School Psychologists. https://www.nasponline.org/standards-and-certification

National Association of School Social Workers. (2012). *NASW standards for school social work services* [handout]. Author.

National Association of School Social Workers. (2022, March 13). *Certified School Social Work Specialist (C-SSWS).* https://www.socialworkers.org/careers/credentials-certifications/apply-for-nasw-social-work-credentials/certified-school-social-work-specialist

National Center for Education Statistics. (2022, February 27). *Children and youth with disabilities.* The Condition of Education. https://nces.ed.gov/programs/coe/indicator_cgg.asp

No Child Left Behind Act of 2001, P.L. 107-110, 20 U.S.C. § 6319 (2002).

O'Donohue, W. D., & Fisher, J. E. (2008). *Cognitive Behavior Therapy: Applying empirically supported techniques in your practice*. Hoboken, NJ: John Wiley & Sons, Inc.

Oliver, R., & Reschly, D. J. (2010). Special education teacher preparation in classroom management: Implications for students with emotional and behavioral disorders. *Behavioral Disorders, 35*(3), 188–199 https://doi.org/10.1177/019874291003500301

OSEP Center on Positive Behavioral Interventions, Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., ... Turnbull, A. P. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2*(3), 131-143. https://doi.org/10.1177/109830070000200302

Overview, explanation, and comparison. (2004). *IDEA 2004 v. IDEA 97.* Retrieved from https://www.wrightslaw.com/idea/idea.2004.all.pdf

Pipkin, C. S. P., Vollmer, T. R., & Sloman, K. N. (2010). Effects of treatment integrity failures during differential reinforcement of alternative behavior: A translational model. *Journal of Applied Behavior Analysis, 43*(1), 47-70. https://doi.org/10.1901/jaba.2010.43-47

Reinke, W. M., Stormont, M., Herman, K. C., & Newcomer, L. (2014a). Using coaching to support teacher implementation of classroom-based interventions. *Journal of Behavioral Education, 23*(1), 150-167. https://doi.org/10.1007/s10864-013-9186-0

Reinke, W. M., Stormont, M., Herman, K. C., Wang, Z., Newcomer, L., & King, K. (2014b). Use of coaching and behavior support planning for students with disruptive behavior within a universal classroom management program. *Journal of Emotional and Behavioral Disorders, 22*(2), 74-82. https://doi.org/10.1177/1063426613519820

Reyes, M. R., Brackett, M. A., Rivers, S. E., Elbertson, N. A., & Salovey, P. (2012). The interaction effects of program training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning. *School Psychology Review, 41*(1), 82–99. https://doi.org/10.1080/02796015.2012.12087377

Roach, A. T., Lawton, K., & Elliott, S. N. (2014). Best practices in facilitating and evaluating intervention integrity. In A. Thomas & P. Harrison (Eds.), *Best practices in school psychology: Data-based and collaborative decision making* (pp. 133-146). Guilford Press.

Robertson, R. E., Kokina, A. A., & Moore, D. W. (2020). Barriers to implementing behavior intervention plans: Results of a statewide survey. *Journal of Positive Behavior Interventions, 22*(3), 145-155. https://doi.org/10.1177/1098300720908013

Sanetti, L. M. H., Collier-Meek, M. A., Long, A. C., Byron, J., & Kratochwill, T. R. (2015). Increasing teacher treatment integrity of behavior support plans through consultation and implementation planning. *Journal of School Psychology, 53*(3), 209-229. https://doi.org/10.1016/j.jsp.2015.03.002

Sanetti, L. M. H., & Kratochwill, T. R. (2009). Toward developing a science of treatment integrity: Introduction to the special series. *School Psychology Review, 38*(4).

Sheridan, S. M., Clarke, B. L., Knoche, L. L., & Pope Edwards, C. (2006). The effects of conjoint behavioral consultation in early childhood settings. *Early Education and Development, 17*(4), 593-617. https://doi.org/10.1207/s15566935eed1704_5

Sterling-Turner, H. E., Watson, T. S., & Moore, J. W. (2002). The effects of direct training and treatment integrity on treatment outcomes in school consultation. *School Psychology Quarterly, 17*(1), 47. https://doi.org/10.1521/scpq.17.1.47.19906

Sterling-Turner, H. E., Watson, T. S., Wildmon, M., Watkins, C., & Little, E. (2001). Investigating the relationship between training type and treatment integrity. *School Psychology Quarterly, 16*(1), 56. https://doi.org/10.1521/scpq.16.1.56.19157

Van Oorsouw, W., Embregts, P. J. C. M., Bosman, A. M. T., & Jahoda, A. (2010). Training staff to manage challenging behaviour. *Journal of Applied Research in Intellectual Disabilities, 23*(2), 192–196. https://doi.org/10.1111/j.1468-3148.2009.00522.x

Wagner, M., & Newman, L. (2012). Longitudinal transition outcomes of youth with emotional disturbances. *Psychiatric Rehabilitation Journal, 35*(3), 199–208. https://doi.org/10.2975/35.3.2012.199.208

Weber, K. P., Killu, K., Derby, K. M., & Barretto, A. (2005). The status of functional behavioral assessment (FBA): Adherence to standard practice in FBA methodology. *Psychology in the Schools, 42*(7), 737-744. https://doi.org/10.1002/pits.20108

Wilder, D. A., Atwell, J., & Wine, B. (2006). The effects of varying levels of treatment integrity on child compliance during treatment with a three-step prompting procedure. *Journal of Applied Behavior Analysis, 39*(3), 369-373. https://doi.org/10.1901/jaba.2006.144-05

Wilkinson, L. A. (2006). Monitoring treatment integrity: An alternative to the 'consult and hope' strategy in school-based behavioral consultation. *School Psychology International, 27*(4), 426-438. https://doi.org/10.1177/0143034306070428

Wilkinson, L. A. (2007). Assessing treatment integrity in behavioral consultation. *International Journal of Behavioral Consultation and Therapy, 3*(3), 420. http://dx.doi.org/10.1037/h0100816

Wright, D. B., Cafferata, G., Keller, D., & Saren, D. (2013). *The BIP desk reference: a teacher and intervention team's guide to developing and evaluating behavior intervention plans for behaviors that interfere with the learning of student and/or peers*. Retrieved from http://www.pent.ca.gov/dsk/BIPdeskreference2013.pdf

Wright, J. (2010). *How RtI works' series* [White paper]. Whitepaper for Interventioncentral.Org, 1-6.

Wright, P. W. D. (2004). *The individuals with disabilities education improvement act of 2004*. https://www.wrightslaw.com/idea/law/regs.prop.sld.htm

APPENDIX

<u>Charts</u>

Figure 1: Frequency *Percentages for Overall Adequacy of Training (Understanding and Implementing) by Profession*

_____

_____
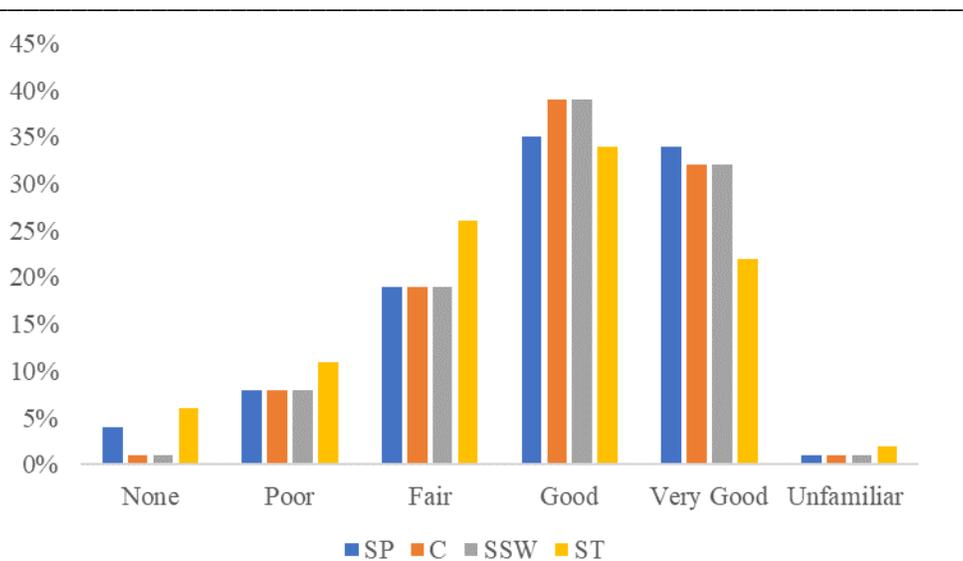
Note: SP= School Psychologist, C= Special Education Consultant, SSW= School Social Worker, and ST= Special Education Teacher. The graph represents the percentage of responses to each Likert-rating.

Figure 2: Frequency *Percentage for Overall Confidence (Planning, Implementing, and Evaluating) by Profession*
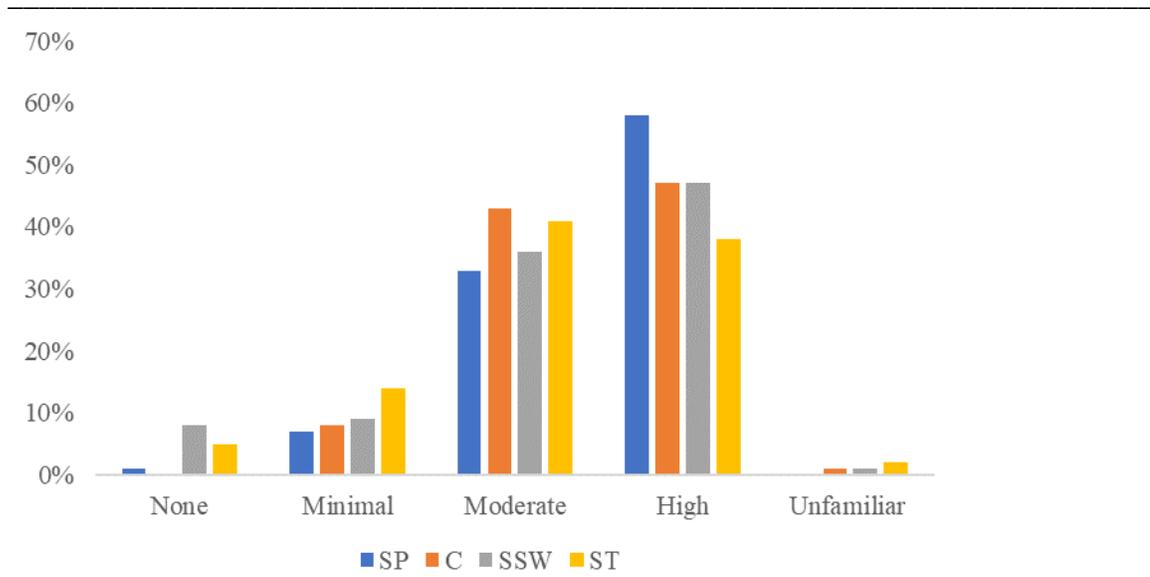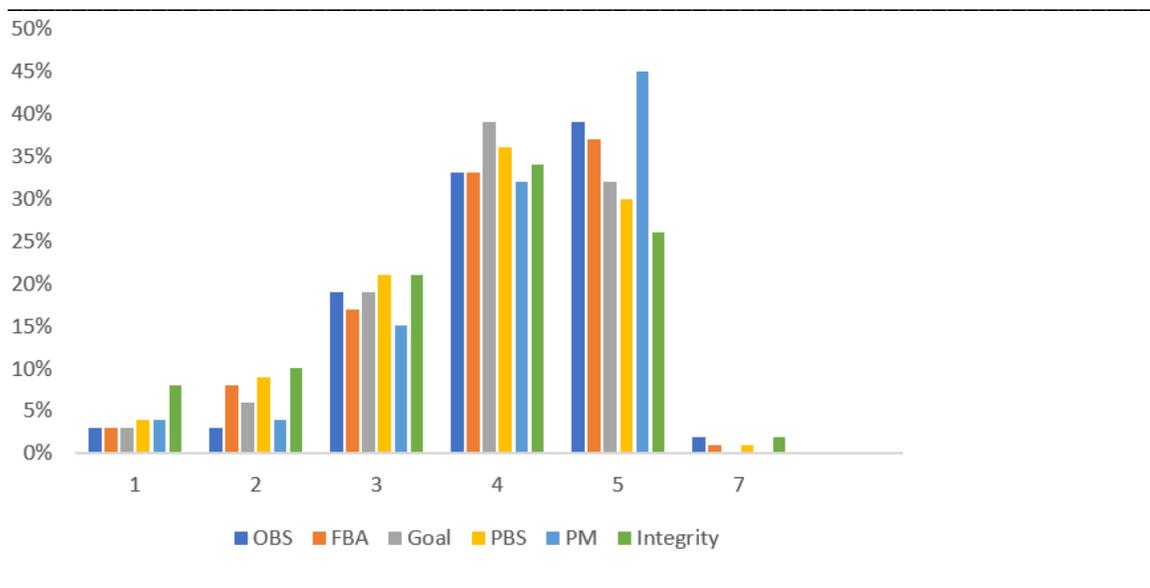
_____

_____

Note: SP= School Psychologist, C= Special Education Consultant, SSW= School Social Worker, and ST= Special Education Teacher. The graph represents the percentage of responses to each Likert-rating.

Figure 3: Frequency *Percentage for Adequacy of Training for Understanding Concepts*
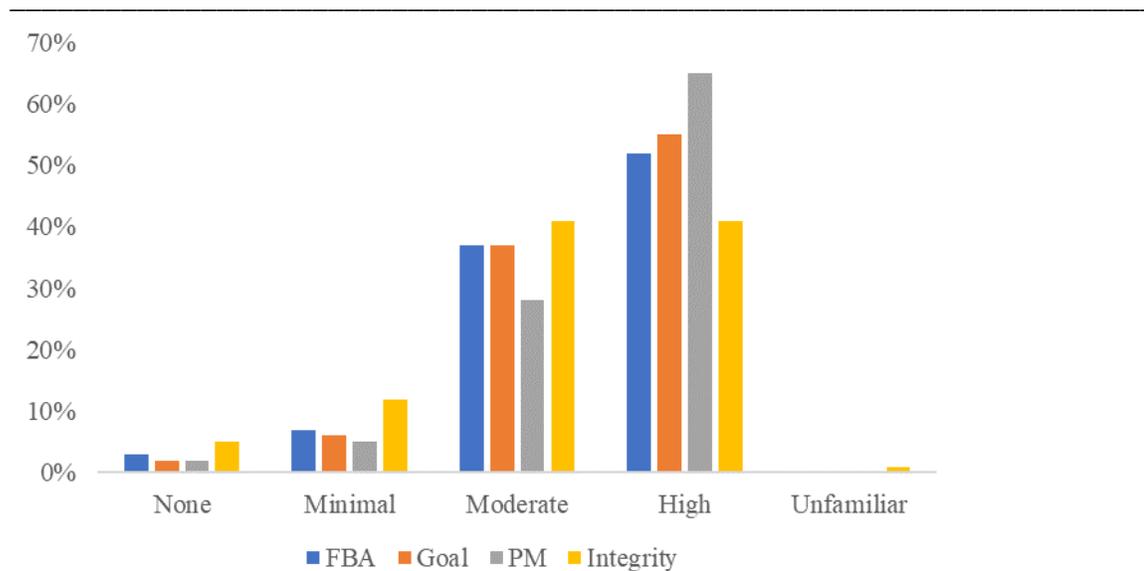
_____

_____

Note: Obs= Behavior Observations, FBA= Functional Behavior Assessment, Goal= Writing Behavior Goals, PBS= Positive Behavior Supports, PM= Progress Monitoring, Integrity= Integrity. The graph represents the percentage of responses to each Likert-rating.

Figure 4: *Frequency Percentages for Adequacy of Training for Implementation*
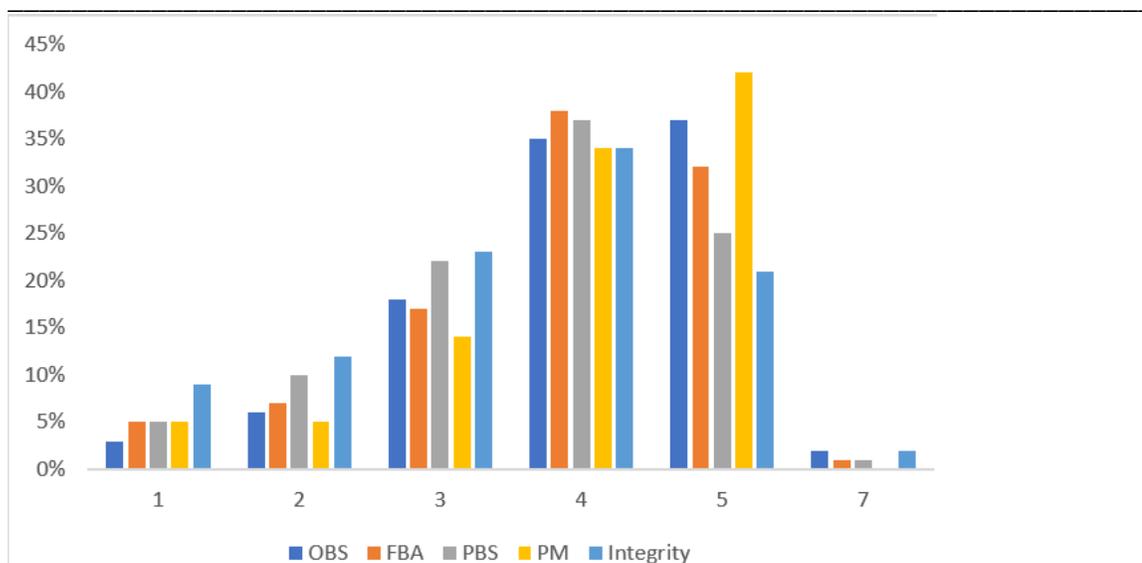
Note: OBS= Behavior Observations, FBA= Functional Behavior Assessment, PBS= Positive Behavior Supports, PM= Progress Monitoring, Integrity= Integrity. The graph represents the percentage of responses to each Likert-rating.

Figure 5: *Frequency Percentages for Confidence in Knowledge for Planning*

_____

_____

Note: FBA= Functional Behavior Assessment, Goal= Writing Behavior Goals, PM= Progress Monitoring, Integrity= Integrity. The graph represents the percentage of responses to each Likert-rating.

Figure 6: *Frequency Percentages for Confidence in Knowledge for Implementation*

Note: Obs= Behavior Observations, FBA= Functional Behavior Assessment, Goal= Writing Behavior Goals, PBS= Positive Behavior Supports, PM= Progress Monitoring, Integrity= Integrity. The graph represents the percentage of responses to each Likert-rating.
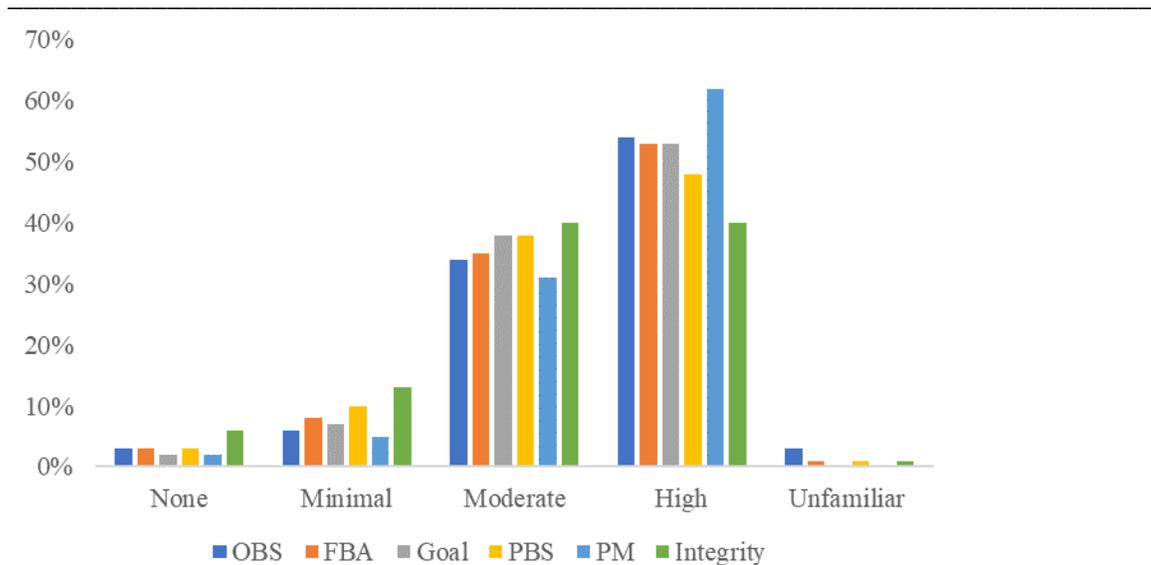
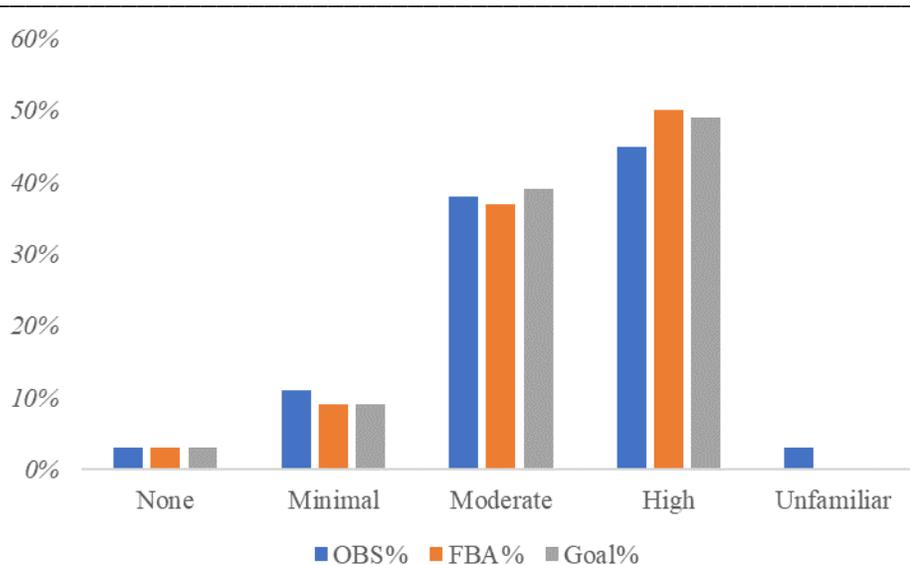Figure 7: *Frequency Percentages for Confidence in Knowledge for Evaluating*

_____

_____

Note: Obs= Behavior Observations, FBA= Functional Behavior Assessment, Goal=
Writing Behavior Goals. The graph represents the percentage of responses to each Likert-
rating.

Informed Consent From

Research Informed Consent

Training for Challenging Behaviors in the School Setting

Kenzie Miller

College of Education

University of Northern Iowa

kemiller@uni.edu

PURPOSE OF STUDY

Behavior Intervention Plans (BIP) are legally binding documents that ensure students with challenging behavior get the interventions that are needed to be successful in the school setting. Many different personnel in the school settings are asked to create the BIP and implement it. The primary purpose of this study is to identify behavior intervention training of different school personnel and to identify what training is missing. This research will inform future training and professional development to ensure quality BIPs are implemented with integrity.

PROCEDURES

If you wish to consent to the survey, then you will be asked three questions that will tell you whether or not you are eligible for the study. If you are eligible to continue in the study, you will be asked a series of questions, and once you have completed all items of the survey it will notify you that you are done. After completing the survey your participation in the study is complete. It will take approximately 15-20 minutes to complete the survey.

RISKS

The risks for this study are minimal. The survey will be as short as possible and will not ask any additional questions that are not needed to help minimize the time you spend filling out the survey.

BENEFITS

Individuals who participate in research will help to further science. Participating in research will provide feedback and could influence training and personal development around BIP implementation and integrity.

CONFIDENTIALITY

Every effort will be made by the researcher to preserve your confidentiality including the following:

> • Password protected data

> • There will be no data collected with your identifying information linked to it.

Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data via third parties.

COMPENSATION

No compensation will be offered for participation.

CONTACT INFORMATION

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Researcher directly you many contact Dr. Nicole Skaar, my faculty research advisor at 319-273-7649 at the Department of Educational Psychology & Foundations; you can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to virtually sign this consent form by clicking "Yes, I agree to participate". If you do not wish to participate, click "No, I do not wish to participate". After you sign the consent

form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher or the University of Northern Iowa. If you withdraw from the study before data collection is completed, your data will be destroyed.

CONSENT

I have read, and I understand the provided information and have emailed any questions I have to the primary researcher. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form attached in the email that I received. I voluntarily agree to take part in this study.

Recruiting Email

Subject: Questionnaire Regarding Training and Confidence with BIP's

Hello,

My name is Kenzie Miller. I am currently a graduate student at the University of Northern Iowa, in the School Psychology program. I have a passion for working with students who have challenging behaviors, and helping train those who work with this population.
I need your help to complete my Master's Thesis. I would love to hear about your training experience when it comes to working with students who display challenging behaviors. You can find the informed consent attached to this email. If you decide to participate you may click this LINK https://uni.co1.qualtrics.com/jfe/form/SV_daFyUgxqxu44L6B to start the survey. This survey should take less than 20 minutes. To qualify for this study, you must be able to read and write in English, and hold one of the following positions: School Psychologist, School Social Worker, Special Education Consultant, or Special Education Teacher, and participate in behavior intervention plans.
It would also be of great benefit if you could forward this to people who you know that work in the following positions: School Psychologist, School Social Worker, Special Education Consultant, or Special Education Teacher.

If you have any questions, please contact me: Kemiller@uni.edu

Thank you for your time and consideration,

Screening Tool

The three questions below are screener questions. If you are eligible for the survey you will be taken to the next session, if you are not eligible you will be taken to the end of the survey.

Can you read and write in English?

☐   Yes

☐   No

Do you currently hold one of the following job titles: School Psychologists, School Counselors, School Social Workers, Special Education Consultants, or Special Education Teachers?

☐   Yes

☐   No

Do you participate in any part of behavior intervention plans (such as developing, implementing, or monitoring)?

☐   Yes

☐   No

If participants answer yes to all three questions: They are eligible to participate in the study. They will then be taken to the survey directions.

If participants answer no to any question, they will be taken to the end of the survey.

Survey Directions

Protocol for Survey Administration

The survey you will be completing asks about your training around challenging behaviors. This survey will ask you to respond to various items related to your training for understanding concepts and implementation, and your confidence in knowledge in planning, implementing, and evaluating. It is certainly NOT expected you will have received training in all, or even any, of the items described in this survey. The items in this survey simply represent some of the behavior approaches, and the goal is to assess how much training you have had with regard to these few approaches.

Please Note:

- Some items in the survey are followed by a brief, but specific, description of that item. Please read each item description carefully as it is critical for two main reasons.
    - 1. The item may have a name you are familiar with, but the name may be referring to something different or something much more specific.

- o 2. You may not recognize the particular name of an item, but they may have received training in that item as indicated by the item description.
- If any item description is unfamiliar to you, please answer "7" as it is likely you have not received training in that particular item. Answering "7" by no means reflects the quality of your training, only the type of training you received.
- Please note that the survey is divided into multiple parts.
  - o You will be asked to answer multiple questions for a variety of items.
  - o The first part of this survey will ask you about you training for understanding concepts (How well do you think your training provided you general knowledge and understanding in the following areas?) and training for implementation (How well do you think your training has prepared you to correctly implement the following areas?).
  - o The second part to this survey will ask you to respond to your confidence in knowledge for planning (How confident are you in planning for the following areas?), implementing (How confident are you that you correctly implement the following areas?), and evaluating efficacy (How confident are you in evaluating the effectiveness of the following areas?).
- Please be cautious to what question you are answering for each item. The essential element in this survey is that you respond to each item according to the specific description of that item, and that you respond as accurately as possible.

Thank you so much for your time! Please do not hesitate to email me, Kenzie Miller at kemiller@uni.edu to clarify any items that may be unclear to you.

<u>Thesis Questions</u>

*Blank areas were not included in the survey.

Demographics:

What is your race?

- American Indian or Alaska Native

- Asian

- Hispanic or Latino

- Native Hawaiian or Other Pacific Islander

- White

- I prefer not to answer

What is your gender?

- Male

- Female

- I prefer not to answer

What is the highest degree you hold?

- BS/BA

- MS/MAE

- ED.S

- Ph.D

What is your current position?

- School Psychologist

- School Counselor

- School Social Worker

- Special Education Consultant

- Special Education Teacher

-

Number of years in position: _____

Number of years working with Behavioral Intervention Plans: _____

Thinking about developing and conducting behavioral observations, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?)						Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?)					
	None	Poor	Fair	Good	Very Good	Unfamiliar	None	Poor	Fair	Good	Very Good	Unfamiliar
Systematic Direct Observation	1	2	3	4	5	7	1	2	3	4	5	7
Baseline Design	1	2	3	4	5	7	1	2	3	4	5	7
A-B-C recording	1	2	3	4	5	7	1	2	3	4	5	7

Please add any other comments you think are relevant regarding your educational training about Behavioral observation measures

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in; 2) confidence in implementing a BIP; and, 3) <u>evaluating the efficacy of that component</u> in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

						Confidence in knowledge of <u>Implementation</u> (How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Evaluating Efficacy</u> (How confident are you in evaluating the effectiveness of the following areas?) None Minimal Moderate High Unfamiliar				
Systematic Direct Observation						1	2	3	4	7	1	2	3	4	7
Baseline Design						1	2	3	4	7	1	2	3	4	7
A-B-C recording						1	2	3	4	7	1	2	3	4	7

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing, or evaluating Behavioral observation measures.

_____

_____

Thinking about your training in functional behavioral assessments, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?)						Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?)					
	None	Poor	Fair	Good	Very Good	Unfamiliar	None	Poor	Fair	Good	Very Good	Unfamiliar
FBA (functional behavioral assessments)	1	2	3	4	5	7	1	2	3	4	5	7
Using FBA data to guide interventions decisions	1	2	3	4	5	7	1	2	3	4	5	7
Antecedents	1	2	3	4	5	7						
Consequences	1	2	3	4	5	7						
Escape	1	2	3	4	5	7						
Tangible	1	2	3	4	5	7						
Attention	1	2	3	4	5	7						
Automatic	1	2	3	4	5	7						

Please add any other comments you think are relevant regarding your educational training about functional behavioral assessment process.

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in 1) <u>planning</u> a BIP; 2) confidence in implementing a BIP; and, 3) <u>evaluating the efficacy of that component</u> in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

	Confidence in knowledge for <u>Planning </u>(How confident are you in planning for the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Implementation </u>(How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Evaluating Efficacy </u>(How confident are you in evaluating the effectiveness of the following areas?) None Minimal Moderate High Unfamiliar				
FBA (functional behavioral assessments)	1	2	3	4	7	1	2	3	4	7	1	2	3	4	7
Using FBA data to guide interventions decisions	1	2	3	4	7	1	2	3	4	7	1	2	3	4	7
Antecedents											1	2	3	4	7
Consequences											1	2	3	4	7
Escape											1	2	3	4	7
Tangible											1	2	3	4	7

												1	2	3	4	7
Attention												1	2	3	4	7
Automatic												1	2	3	4	7

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing, or evaluating functional behavioral assessments

_____

_____

_____

Thinking about developing and conducting behavioral goals, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?)						Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?)					
	None	Poor	Fair	Good	Very Good	Unfamiliar	None	Poor	Fair	Good	Very Good	Unfamiliar
Setting reasonable goals	1	2	3	4	5	7	1	2	3	4	5	7
Writing behavioral objectives: Process of specifying one or more target behaviors, the conditions in which the behavior(s) occur and the criterion for	1	2	3	4	5	7	1	2	3	4	5	7

performance related to educational goals for a class or particular student.												

Please add any other comments you think are relevant regarding your educational training about writing behavioral goals.

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in 1) <u>planning</u> a BIP; 2) confidence in implementing a BIP; and, 3) <u>evaluating the efficacy of that component</u> in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

	Confidence in knowledge for <u>Planning</u> (How confident are you in planning for the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Implementation</u> (How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Evaluating Efficacy</u> (How confident are you in evaluating the effectiveness of the following areas?) None Minimal Moderate High Unfamiliar				
Setting reasonable goals	1	2	3	4	7	1	2	3	4	7	1	2	3	4	7

Writing behavioral objectives: Process of specifying one or more target behaviors, the conditions in which the behavior(s) occur and the criterion for performance related to educational goals for a class or particular student.	1	2	3	4	7	1	2	3	4	7	1	2	3	4	7

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing, or evaluating behavioral goals.

_____

_____

_____

Thinking about developing and conducting positive behavioral supports to increase or decrease behaviors, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?) None Poor Fair Good Very Good Unfamiliar	Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?) None Poor Fair Good Very Good Unfamiliar

Prompting student behavior (e.g., use of response prompts, verbal prompts, gestural prompts, etc.) before the desired behavior occurs.	1	2	3	4	5	7	1	2	3	4	5	7
Planning for the generalization of a particular behavior or skill: Using specified materials and/or instructional procedures when training behaviors in one setting to help ensure the same behaviors will occur in different but similar settings.	1	2	3	4	5	7	1	2	3	4	5	7
The principle of reinforcement, which states that the immediate presentation of something desirable (e.g., activity, object) or the removal of something undesirable following a response increases the future frequency of that response	1	2	3	4	5	7	1	2	3	4	5	7

The principle of shaping behavior, which refers to obtaining a desired behavior by reinforcing closer and closer approximations of behavior until the desired behavior is achieved.	1	2	3	4	5	7	1	2	3	4	5	7
The principle of fading, which involves the gradual removal of prompts so behavior can occur more independently.	1	2	3	4	5	7	1	2	3	4	5	7
The concept of Differential reinforcement: reinforcing appropriate behaviors and putting inappropriate behaviors on extinction.	1	2	3	4	5	7	1	2	3	4	5	7
The principle of response chaining: a teaching a series of behaviors where one behavior has to happen before the next behavior. Behavior must happen in a procedural order and	1	2	3	4	5	7	1	2	3	4	5	7

must be reinforced at each level.												
Error correction procedures: After a student displays an incorrect behavior response, the teacher models the correct response and/or provides the student with a type of prompt (e.g., verbal prompt) that informs the student how to respond correctly.	1	2	3	4	5	7	1	2	3	4	5	7
Creating Structure and predictability: using routines and schedules	1	2	3	4	5	7	1	2	3	4	5	7
Token economy: tokens are given to students contingent on a specific behavior occurring. The tokens are used as back-up reinforcers that can be exchanged for preferred items/activities.	1	2	3	4	5	7	1	2	3	4	5	7
Feedback: providing information to students on their performance	1	2	3	4	5	7	1	2	3	4	5	7

Please add any other comments you think are relevant regarding your educational training about positive behavior supports.

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in 1) <u>planning</u> a BIP; 2) confidence in implementing a BIP; and, 3) <u>evaluating the efficacy of that component</u> in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

			Confidence in knowledge of <u>Implementation</u> (How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar									
Prompting student behavior (e.g., use of response prompts, verbal prompts, gestural prompts, etc.) before the desired behavior occurs.					1	2	3	4	7				

Planning for the generalization of a particular behavior or skill: Using specified materials and/or instructional procedures when training behaviors in one setting to help ensure the same behaviors will occur in different but similar settings.						1	2	3	4	7					
The principle of reinforcement, which states that the immediate presentation of something desirable (e.g., activity, object) or the removal of something undesirable following a response increases the future frequency of that response						1	2	3	4	7					
The principle of shaping behavior, which refers to obtaining a desired behavior by reinforcing closer and closer approximations of behavior until the						1	2	3	4	7					

desired behavior is achieved.													
The principle of fading, which involves the gradual removal of prompts so behavior can occur more independently.					1	2	3	4	7				
The concept of Differential reinforcement: reinforcing appropriate behaviors and putting inappropriate behaviors on extinction.					1	2	3	4	7				
The principle of response chaining: a teaching a series of behaviors where one behavior has to happen before the next behavior. Behavior must happen in a procedural order and must be reinforced at each level.					1	2	3	4	7				
Error correction procedures: After a student displays an incorrect behavior response, the teacher models the correct response and/or					1	2	3	4	7				

provides the student with a type of prompt (e.g., verbal prompt) that informs the student how to respond correctly.													
Creating Structure and predictability: using routines and schedules						1	2	3	4	7			
Token economy: tokens are given to students contingent on a specific behavior occurring. The tokens are used as back-up reinforcers that can be exchanged for preferred items/activities.						1	2	3	4	7			
Feedback: providing information to students on their performance						1	2	3	4	7			

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing or evaluating positive behavior supports.

_____

_____

_____

Please add any other comments you think are relevant regarding your educational training in terms of writing the BIP document.

_____

_____

_____

Thinking about developing and using progress monitoring tools, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?)						Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?)					
	None	Poor	Fair	Good	Very Good	Unfamiliar	None	Poor	Fair	Good	Very Good	Unfamiliar
Using charted data to evaluate student behavior progress in order to make decisions about that student.	1	2	3	4	5	7	1	2	3	4	5	7

Please add any other comments you think are relevant regarding your educational training about progress monitoring tools.

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in 1) <u>planning</u> a BIP; 2) confidence in implementing a BIP; and, 3) <u>evaluating the efficacy of that component</u> in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

	Confidence in knowledge for <u>Planning</u> (How confident are you in planning for the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Implementation</u> (How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Evaluating Efficacy</u> (How confident are you in evaluating the effectiveness of the following areas?) None Minimal Moderate High Unfamiliar				
Using charted data to evaluate student behavior progress in order to make decisions about that student.	1	2	3	4	7	1	2	3	4	7	1	2	3	4	7

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing, or evaluating using charted data to evaluate student behavior progress in order to make decisions about that student.

_____

_____

_____

Thinking about developing and conducting intervention integrity monitoring, for each of the following, please indicate 1) how adequate you believe your educational training was in providing a good understanding of the topic and 2) how well your educational training prepared you to implement the component. If you had no training with the component, please select "unfamiliar."

	Adequacy of Training for Understanding Concepts (How well do you think your training provided you general knowledge and understanding in the following areas?)						Adequacy of Training for Implementation (How well do you think your training has prepared you to correctly implement the following areas?)					
	None	Poor	Fair	Good	Very Good	Unfamiliar	None	Poor	Fair	Good	Very Good	Unfamiliar
Concept of fidelity: Implementing a treatment or intervention executing correct procedures of an intervention precisely, reliability, and over an extended period of time. (ability to implement an intervention without an error).	1	2	3	4	5	7	1	2	3	4	5	7
Conducting fidelity checks for self	1	2	3	4	5	7	1	2	3	4	5	7
Conducting fidelity checks for others	1	2	3	4	5	7	1	2	3	4	5	7
Providing feedback to others on implementation	1	2	3	4	5	7	1	2	3	4	5	7

Receiving feedback on implementation	1	2	3	4	5	7	1	2	3	4	5	7

Please add any other comments you think are relevant regarding your educational training about integrity.

_____

_____

_____

Thinking about your <u>confidence in planning, implementing, and evaluating</u> the following components of a BIP, for each of the following, please indicate 1) how confident you are in including this component in 1) <u>planning</u> a BIP; 2) confidence in implementing a BIP; and, 3) evaluating the efficacy of that component in a BIP. If you had no training or experience with the component, please select "unfamiliar/no experience."

	Confidence in knowledge for <u>Planning</u> (How confident are you in planning for the following areas?) None Minimal Moderate High Unfamiliar					Confidence in knowledge of <u>Implementation</u> (How confident are you that you correctly implement the following areas?) None Minimal Moderate High Unfamiliar									
Concept of fidelity: Implementing a treatment or intervention executing															

correct procedures of an intervention precisely, reliability, and over an extended period of time. (ability to implement an intervention without an error).														
Conducting fidelity checks for self	1	2	3	4	7	1	2	3	4	7				
Conducting fidelity checks for others	1	2	3	4	7	1	2	3	4	7				
Providing feedback to others on implementation	1	2	3	4	7	1	2	3	4	7				
Receiving feedback on implementation	1	2	3	4	7	1	2	3	4	7				

Please add any other comments you think are relevant regarding your educational training in terms of planning, implementing, or evaluating the integrity of a behavior intervention plan.

_____