

Decreasing Student Problem Behavior:
Paraprofessional Training and Coaching for
Effective Behavioral Intervention

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Abstract

Behavior problems are a significant obstacle to student learning, and schools have a responsibility to effectively intervene and manage student behavior. The school staff who are responsible for dealing with student behavior require training to be effective in their roles. The purpose of this action research project was to investigate the impact of professional development on support staff's ability to understand and use evidence based behavioral intervention strategies. An intervention was designed consisting of three in-service trainings modules combined with three coaching cycles, focusing on linking the decision making framework found in the Functional Behavior Assessment literature with a variety of concrete behavioral intervention strategies. Impact and process data was collected throughout the study through observation, survey, and discussion. The findings indicate that participants were able to learn and use new behavioral intervention strategies after participating in the study, and that their confidence in their ability to work with challenging student behaviors had improved. Further implications for school leaders regarding the training and support of staff to provide effective behavioral intervention are drawn.

Introduction and Context

ABC Academy is a public charter school located in east Oakland. It serves approximately 480 students in grades 6-12. The student body is 96% Hispanic, 3% Black, and 92% of students receive Free and Reduced Price Lunch. The school has a 95% graduation rate, which is above average for the area. At the same time, the rising rates of both Office Discipline Referrals and Detention indicate a growing problem with student behavior.

Currently ABC Academy is struggling to manage a variety of student behavior problems that are interfering with student learning, such as truancy, tardiness, disruption in the classroom, and students not following school rules in non-classroom spaces. A major impact of these problem behaviors is interruptions in student learning, both for the offending students who lose instructional time while dealing with the consequences of misbehavior, and the other students in class who lose access to their teacher while the behavior problem is being managed.

The driver behind the increase in behavior problems is a recent policy change at ABC Academy. Previously the school operated on a 'zero-tolerance' model of school discipline, where students with behavior problems were frequently suspended or even expelled. Last year, as a result of directives from CMO leadership to comply with statewide legislation regarding behavior, the school administration updated their discipline policies to be more progressive. The new system was intended to reduce or eliminate suspensions and expulsion by managing problem behavior at school. The development and implementation of new policies that reflect the new vision for discipline at the school has been a major challenge for administrators, leading to confusion amongst staff and students. There have been many disagreements between leadership regarding the policies, leading to the plan for school improvement being unclear. Additionally, there is a general lack of consensus and support for the new vision amongst personnel, and a lack

of training and support for new initiatives. This has been compounded by frequent revisions to the existing plan, causing school wide expectations to be unclear. The lack of a clear plan and that can be supported by all school staff has also led to confusion and upheaval amongst the student body, and a significant increase behavior problems.

The school has attempted to integrate components from a variety of evidence based discipline practices into their discipline policies. Principles of Restorative Justice were used when designing the new progressive discipline system. A Response To Intervention (RTI) approach to data collection has been used to organize behavioral intervention. Additionally, pieces of the School-Wide Positive Behavior Interventions and Supports (PBIS) methodology were included in the current discipline system. These new policies, as designed by the Principal and the Deans of Students, have not been finalized, and they have been subject to ongoing change and development throughout the year. The lack of clear expectations has been difficult on both staff and students.

The intended purpose of the new discipline policies was to increase student academic engagement through the use of preventive care strategies that manage discipline issues on campus during the school day, rather than using suspension and expulsion. Data collected on Suspension, Office Discipline Referrals (ODRs), and Detention indicates that while Suspension has experienced a slight decrease, ODRs and Detention have seen a more than 400% compared to the previous year. Additionally, teachers are reporting low morale due to lack of support for the increase in behavior problems. Teachers have reported that their classrooms are sometimes 'un-teachable,' and that they do not have the resources or training to effectively manage behavior in accordance with the new system. As a result of not having training or support for the new plan, teachers have reverted to using the previous methods of zero-tolerance, consequence, and

punishment to deter misbehavior. This has led to disagreement and conflict amongst the teachers, administrators, and the Behavior Team.

The school staff responsible for managing student discipline, include the Principal, the two Deans of Students, classroom teachers, and the eleven members of the Behavior Team (BT). The Principal and Deans are responsible for organizing and supervising school policies and procedures. Teachers are responsible for classroom management in their respective spaces. The BT is responsible for implementing all discipline procedures school wide, including responding to behavior problems in the moment and dealing with any related follow up. Out of the eleven members originally assigned to be on the behavior team, eight of them were new to the school and their roles. Over the course of the school year, six of the original team members left due to feeling unsupported in their roles. While some of these open positions, did get filled by new staff, both the new staff and the existing team report ongoing frustration with the amount of training and support they have received.

In an attempt to address the training and support of this team, school leadership contracted with School Support (SS), a non-profit organization that provides a range of school-based, community-based, and family-focused treatment services. One important goal of the partnership was for SS to provide training, coaching, and organizational support for both the deans and the BT in an effort to improve discipline at the school. The researcher, a staff assigned by SS to work at ABC Academy, holds the title of Support Coach. This role was specifically designed to provide training, coaching, and organizational support for the Behavior Team in order to help improve school wide discipline.

The BT positions were a new addition to the school this year, specifically created to support the new vision for school discipline. The BT is a group of eleven staff with flexible job

assignments and various duties, held together by the shared purpose of managing student behaviors in positive ways. They are the arms and legs of progressive discipline at the school, as well as the front line for intervening when students show problem behaviors. All of the BT are high-school graduates, and five of them hold a bachelor's degree. A few of them are recent graduates from ABC Academy. The majority of the BT are new professionals with limited training and experience. They report that they received little or no training in preparation for their responsibilities, and that they feel ineffective in their roles. They do not currently have any specialized training for providing behavioral intervention with students.

Problem of Practice

Based on the researcher's observations and conversations with school staff, ABC Academy is using an ad hoc and highly variable approach to managing discipline issues at school. The policies are confusing, and the teachers and Behavior Team have not received training to support implementation. Furthermore, the existing policies have frequently been subject to change, and staff members are not confident in implementing the procedures in a consistent way. As a result, the majority of teachers have developed their own rules and responses to behavior challenges. There is now a widespread practice of sending challenging students out of class as a consequence for discipline issues. The vast majority of the students being removed from class are Latino males, who qualify as English Learners. These students often continue their problem behaviors in the hallways and common areas, which results in them missing significant amounts of instructional time, and also disrupts the learning environment for other students.

Students who are sent out of the class as a result of misbehavior become the responsibility of the Behavior Team. The BT is expected to provide behavioral intervention to

deescalate the student, help them process the incident, complete any necessary follow up, and assist them with returning to class in a 'ready to learn' mindset. The length of time it takes to complete these steps is contingent on both the approach that the BT staff uses to intervene and the severity of the situation. It is not uncommon for students to be out of class for multiple academic periods while the BT works to resolve the incident.

The BT reported not having received any specialized training for their roles, and that they are not familiar with any evidence based approach to intervening with student problem behavior. Instead, BT staff operates by forming individual and positive relationships with students, and they attempt to use their relationships to both deescalate situations and persuade students to get back to class. These relationships are highly rewarding for students, as it gives them an opportunity to air grievances, get advice, feel connected to a trusted adult, engage in humor, socialize, and even get one-on-one tutoring support. Students appear to be seeking out these highly rewarding relationships with BT staff instead of being motivated to behave and remain in their classrooms. Students have even begun to report that they are trying to get sent out of class by being disruptive in order to spend time with BT staff. This has resulted in students experiencing a loss of instructional time, lower grades, and weaker relationships with their teachers, ultimately creating a negative feedback loop that encourages further misbehavior.

The Behavior Team is not currently making a positive impact on student behavior. BT staff report that they deal with the same students with the same problems, day after day, and that both the frequency and duration of problem behaviors has not been reduced. The BT does not use a consistent evidence based approach to behavioral intervention. Instead, they report using their individual relationships with students to attempt persuade students to comply with school rules. The BT does not use common language to describe their work or intervention strategies,

which leads to misunderstandings about practices and lack of shared vision. The BT reports feeling confused about its responsibilities, and members are reporting frustration with the lack of support and training for their roles.

At root, the problem of practice is that the Behavior Team is not able to effectively or consistently manage student behavior problems at the school.

Literature Review

Introduction

Effective and consistent behavior intervention is an essential component of student academic success (McIntosh et al., 2006). It is imperative that all school staff strives to create the conditions where students can excel, therefore it is vital for all school staff to be trained in effective behavior management strategies (McIntosh et al., 2006).

There are many evidence based practices and curricula designed to provide school staff with the skills to both manage and modify student behavior (Niesyn, 2009; Fecser, 2015; Bassette 2007; Van Acker 2006; Kamps 2006;). A tremendous amount of research has been done into classroom management, and most of this work is directed at teachers (Niesyn, 2009; Fecser, 2015). There is another large body of literature devoted to intervention strategies for behaviorists, school counselors, special education teachers, psychologists, therapists, and other certificated roles (Niesyn, 2009; Fecser, 2015; Bassette 2007; Van Acker 2006; Kamps 2006). Surprisingly, there are limited studies focused on developing paraprofessionals' intervention skills. The literature that does exist in this area suggests that paraprofessional training should balance intervention strategies with a theoretical framework for decision making (Bassette 2007; Van Acker 2006; Kamps 2006)

Based on an analysis of the literature discussed below, the action research will argue that a basic understanding of Functional Behavior Assessment will provide Behavior Team staff with a useful theoretical framework for selecting interventions that will have a positive impact on students' behavior. Additionally, the report will draw from the literature to identify effective strategies that will allow paraprofessionals to intervene with behavior problems directly. Finally, the report will review the literature regarding professional development strategies that can be used to best develop the skills of paraprofessionals in these areas.

Functional Behavior Assessment

Functional Behavior Assessment (FBA) provides an evidence based theoretical framework for selecting interventions to decrease problem behaviors (Packenham 2004). The literature indicates a number of distinct strengths in the FBA process. FBA promotes the use of data in decision making (Packenham 2004). The FBA process is pro-active and focuses on skill building rather than punishment (Packenham 2004). FBA processes have been found to increase the odds of a positive intervention outcome, and to also increase the chance of maintenance and generalizability of the success. (Packenham 2004). Paraprofessionals have been found to be effective practitioners of the FBA process when provided with adequate training (Bassette 2007). For the purposes of this action research, FBA has been chosen as the preferred tool because of the above reasons, as well as the overwhelming body of evidence supporting FBA as an effective theoretical framework for selecting behavioral interventions.

The FBA process can be used to determine the purpose or cause of a student's misbehavior by analyzing the Antecedents that trigger a specific Behavior, as well as any Consequences that occur (Scott, 2008; Van Acker 2006). These three components, informally described as at the ABCs, make up the core of FBA (Scott, 2008; Van Acker 2006). The term

Antecedents encompasses any environmental factors that may trigger negative behaviors, as well as the observable behaviors that the student displays prior to engaging in negative behaviors (Scott, 2008; Van Acker 2006). The FBA process is designed to look closely at the routines and circumstances in which a problem behavior frequently happens in order to identify potential triggers or Antecedents for the behavior (Scott, 2008; Van Acker 2006). This data becomes useful when designing an intervention, as it provides insight into potential changes to the environment or routines that may minimize potential triggers to problem behavior (Scott, 2008). Once this data has been gathered, the FBA process then generates an operational definition of the Behavior, using strictly observable descriptors and terminology to give an accurate portrayal of how the behavior manifests itself in the environment (Scott, 2008; Van Acker 2006).

When the context and behavior have been defined, a hypothesis regarding the proposed function of the behavior is formed (Scott, 2008). Following the creation of this hypothesis, the observer then seeks to identify the immediate aftereffects of this behavior, understood as the Consequence (Scott, 2008). The assumption is that patterns of behavior occur for a reason, that even negative consequences may be meeting an underlying need for the youth in that moment and thus reinforcing the pattern of behavior (Scott 2008).

The underlying need driving the problem behavior is, by definition, powerful enough to override any other negative outcomes (Scott 2006). In order to design an effective intervention to address the problem behavior, it is important to develop a thorough understanding of the consequence that reinforces it. These underlying needs tend to fall into one of two categories: Access or Escape (Scott 2006). A youth may demonstrate behaviors in order to gain access to an item or outcome such as a preferred activity, to access attention from others, or to access a form of sensory stimulation. It follows that a youth may also show behavior to escape from a non-

preferred activity, escape from undesirable attention, or escape a non-pleasurable sensation. The FBA process provides much of the necessary data necessary for identifying these reinforcing consequences, which can then be used when planning for behavioral change (Scott 2006).

The FBA process is ultimately intended to assist in identifying interventions that may be utilized to decrease the incidence of the problem behavior (Scott, 2008; Van Acker, 2006). The intervention designed to do this may target any combination of the three specific components of the ABCs; the antecedent, the behavior, or the consequence. Interventions focused on the antecedent may involve the changing of routines or environments in which the behavior occurs, thus reducing or eliminating exposure to triggers (Scott, 2008; Van Acker, 2006). An intervention targeting the behavior and its reinforcing consequence will focus on teaching Replacement Behaviors, or alternative patterns of action that will allow the youth to meet their underlying need in a less problematic manner (Scott, 2008; Van Acker, 2006). Strategies for teaching replacement behaviors are therefore an extremely important facet of the work (McIntosh, et al 2006).

The 2004 Individuals with Disabilities Education Act mandated the use of FBA when a special education student's behavior significantly impedes learning or puts them at risk for change of placement (Scott, 2008; Van Acker, 2006; Pakenham, 2004). As a result of this legislation, the use of the FBA process quickly became widespread. Because the law does not explicitly describe the FBA process, the details of implementation were left in the hands of the school professionals who use the practice (Scott, 2008; Van Acker, 2006; Pakenham, 2004). This has created some variation in the manner in which the FBA process is used. While researchers quickly worked to fill the gap between the broad legal mandate for FBA and the actual practices that should be used, this gap created an unique opportunity whereby different

approaches to the FBA process were found to have a range of useful applications (Scott, 2006; Van Acker, 2006; Bassette; 2007).

The research indicates that there are two broad approaches to conducting FBAs in the field, formal FBAs and efficient FBAs (Scott, 2006; Packenham, 2004). While the formal FBA process is more technical and has more fidelity to the research, it is more time intensive and requires a high degree of training to implement successfully, often requiring an outside consultant (Scott, 2006; Packenham, 2004). It has been noted that many schools using the Formal process tend to assign one staff individual responsibility for implementing the FBA process, and that this approach has a number of weaknesses (Scott, 2006; Packenham, 2004). The assigned individual may not have the expertise to implement the process accurately or may have a built in bias. They may not have the time or capacity to conduct FBAs with the large number of students who could benefit from them. Additionally, an individual staff may leave the school or be reassigned to a new role, leaving the school without the capacity to conduct FBAs (Scott, 2006; Packenham, 2004).

In order to mitigate these challenges, the Efficient FBA model has grown in popularity (Scott, 2006; Packenham, 2004). The efficient FBA uses a simplified or truncated approach to data collection and hypothesis creation (Scott, 2006; Packenham, 2004). Data collection in this model, is conducted by a range of personnel, which can significantly speed up the process (Scott, 2006; Packenham, 2004). This team-based approach can more readily meet the needs of a wider range of students while ensuring greater sustainability of practice in the school setting (Scott, 2004). The composition of the team in this model can be composed of a range personnel depending on the setting, but common participants often include an administrator, a behaviorist, special education teacher, and general education teacher (Scott 2004; Packenham 2004). In some

instances, para-professionals have been found to be helpful contributors to both the observation and implementation processes of the FBA (Bassette, 2007).

There is evidence that paraprofessionals can be active participants in the FBA process. (Bassette, 2007). A study conducted by Bassette in 2007 found that after a brief amount of in-service training, a paraprofessional was able to implement components of the FBA process and design effective interventions that successfully decreased problem behaviors with the target student (Bassette, 2007). Additionally, there is a large body of evidence indicating that paraprofessionals and other classified school staff are an important resource in the team-based model of FBA implementation (Van Acker, 2006; Kamps, 2006). In fact, many studies suggest that training all school staff in the FBA process, including both theoretical to practical components, can decrease the incidence of problem behaviors for targeted students (Van Acker, 2006; Kamps, 2006).

The research also suggests that using FBA to design interventions can benefit all students, not just those in special education (Kamps 2006;). As evidence for the efficacy of using FBA to benefit all students, consider the widespread success of the Positive Behavior Intervention and Supports (PBIS) model. The PBIS approach to school wide behavior modification is built upon the concepts and practices of FBA. PBIS involves the training of *all* school staff, including paraprofessionals and classified staff, in using the principles of FBA to support the PBIS systems (Van Acker, 2006; Kamps, 2006). PBIS can briefly be described as an operational framework to ensure that all school staff are able to provide the most effective behavioral interventions possible to the student body (Van Acker, 2006; Kamps, 2006)

The success of PBIS is well documented. PBIS is currently being used in over 21,000 schools nationwide (Wilson, 2015). One example can be found in a high school in the Chicago

Public School system. This high school was composed of a culturally diverse group of 1,800 students of whom 89% of students were receiving free and reduced price lunch, 21% were English Learners, and 20% of students were receiving Special Education services (Bohanon et al. 2006). Following implementation of schoolwide PBIS and the principles of FBA, the school system showed a 20% reduction in Office Discipline Referrals (ODRs) over the three years (Bohanon et al. 2006). The ODR tool is a common measure of schoolwide incidence of behavior challenges.

Similarly successful case studies can be documented at the state level. In Maryland, PBIS in 467 public schools decreased ODRs to 43% less than the national average (Barrett et al., 2008). In North Carolina, 737 schools implemented a PBIS system, resulting in positive impacts when compared to national averages in ODRs (Reynolds et al., 2009). A similar study of 103 schools in Iowa found that PBIS contributed to a 42% reduction in ODRs over two years (Mass-Galloway et al., 2008). A study of 28 K-12 programs in New Hampshire also found PBIS to be effective for reducing problem behaviors as measured by ODRs, with the highest impacts being found at the high school level (Muscott, 2008).

As shown above, the principles of functional behavior analysis have been used extensively and effectively, allowing school staff, including paraprofessionals, to intervene effectively with problem behaviors presented by any given student (Bassette, 2007; Van Acker, 2006; Kamps, 2006; Bohanon et al., 2006; Barrett et al., 2008; Reynolds et al., 2009; Mass-Galloway et al., 2008; Scott, 2004; Packenham; 2004)

Intervention Tools

It is well documented that effective behavioral intervention is a necessary component of student learning (McIntosh et al., 2006). It has been found that at least 50% of all problem

behavior occurs in non-classroom settings (Leedy, 2004). The school staff who supervise these settings have an important role to play in promoting student learning (Van Acker 2006; Kamps 2006).

A recent study in New York showed that teachers in schools using PBIS practices such as Functional Behavior Assessment had significantly higher knowledge ratings of behavior management techniques than teachers in non-PBIS schools (Ficarra, 2014). Intervening with student problem behaviors to teach replacement behaviors is a central component of creating behavioral change through the FBA process (Scott, 2006; Van Acker, 2006).

Behavior intervention has been defined as “...the actions teachers take to create an environment that supports and facilitates both academic and social emotional learning” (Evertson, 2006). Problem behaviors at school occur across a spectrum of severity, and the same tools that work to manage mild problem behaviors may not work to manage the acute (Kartub, 2000). The principles of Functional Behavior Assessment allow the practitioner to identify when and why to intervene with a behavior (Scott 2006; Van Acker 2006; Bassette; 2007). The important decision of how to intervene, using which specific tool, depends on the intervention strategies that are in the practitioners toolbox. Selection of the right intervention strategy provides the practitioner the opportunity to prevent further escalation behavior. (Niesyn, 2009; Fecser, 2015).

When training staff on intervention strategies, it is important to ensure that the interventions are effective, practical in a range of settings, and durable over time (Kartub, 2000). The literature provides a wide range of in-the-moment interventions that meet these criteria (Niesyn, 2009; Fecser, 2015, Sprinson 2010; Kartub, 2000). Behavioral interventions can be grouped into seven broad categories; Counseling; Interruption; Active; Motivational; Guided

Self; Group Intervention; and Crisis Intervention (Sprinson, 2010). Within each of these categories there is a range of discrete practices that can be used to intervene with and modify behavior depending on the circumstances at hand (Sprinson, 2010). Counseling interventions are designed to engage the youth in expressing and exploring their thoughts and feelings (Sprinson, 2010). Interruption interventions are intended to interrupt a problem behavior in order to prevent it from continuing (Sprinson, 2010). Active interventions are used to get a youth moving and provide an alternative to the problem behavior (Sprinson, 2010). Motivational interventions are designed to encourage and reward desired behavior (Sprinson, 2010). Guided Self interventions can be taught to a youth in advance so that they can manage their own behaviors better (Sprinson, 2010). Group interventions are effective when problem behavior is being displayed by multiple youths or when it is more appropriate to not single out an individual. Crisis interventions are to be used during dangerous situations to improve the chances of a safe outcome (Sprinson, 2010).

Finally, the relationship between the practitioner and the youth is also an essential component in the success of any intervention (Fecser, 2015; Sprinson 2010). The impact of an intervention is influenced by how strong or weak the relationship is between the practitioner and the youth (Sprinson, 2010). Practitioners are encouraged to maintain a calm and confident demeanor, to show empathy and compassion for the youth, and to attempt to be both consistent and predictable when intervening with problem behaviors (Fecser, 2015).

This action research argues that training the Behavior Team in a combination of the principles of Functional Behavior Assessment and the above practical intervention strategies will improve their ability to provide effective behavioral intervention, leading to reductions in the frequency and duration of problem behavior.

Professional Development

While it is clear that building staff's knowledge of Functional Behavior Assessment and practical behavioral intervention tools can lead to a reduction in problem behavior, it should be noted that training staff is a complex process (Joyce, 1980; Lave, 1991; Vygotsky, 1978; Dunlap et al., 2000). The BT staff has variable amounts of education, with limited experience with formal professional development. Based on the literature outlined below regarding in-service professional development and coaching, this action research argues that rigorously planned in-service training combined with context-embedded individual coaching will yield the greatest improvements in the performance of classified staff (Joyce, 1980; Lave, 1991; Vygotsky, 1978; Dunlap et al., 2000).

There exists a large body of literature devoted to adult learning in school settings, but there is limited research on the specific topic of training para-professionals or equivalent staff to implement effective behavioral intervention. Therefore, for the purposes of this action research, ideas and practices from the literature on teacher coaching and professional development have been used to argue the components of the planned intervention at ABC Academy.

The research into teacher professional development covers a great amount of territory, yet the essential components of good in-service training are largely agreed upon (Joyce, 1980; Lave, 1991; Vygotsky, 1978; Dunlap et al., 2000). In-service training has been shown to be an effective way of teaching school staff new skills to be transferred to their individual practice (Joyce, 1980). Context embedded training, or 'situated learning,' results in improved skill integration (Lave, 1991). Training that is relevant to the existing context allows participants to engage in the material in an authentic way, and to apply what they have learned more readily (Lave, 1991). Skills learned in a context embedded format have an increased probability of

persisting over time (Lave, 1991). As noted by Vygotsky (1978), people retain and integrate training materials more effectively when learning is combined with practicing. Therefore, good professional development creates a space for participants to use the new skills being introduced, to problem solve as the need arises, and to consider various applications. Additionally, it is noted that there is a social element to learning, and that collaboration results in better retention and application of skills (Vygotsky, 1978; Dunlap et al., 2000).

Literature reviewing the most effective strategies of in-service training for PBIS implementation highlights important themes (Dunlap et al., 2000). A comprehensive approach to training that balances both the philosophical or conceptual aspects of the training as well as the specific processes and systems that get used in practice is most effective for skills transfer (Dunlap et al., 2000). Providing direct instruction on the theory and application of functional behavior assessment is an essential component of building a comprehensive behavior management system (Dunlap et al., 2000). Participants benefit most when given the opportunity to practice with the material through both examples and activities, with ongoing feedback concerning their use of the skills. The use of case studies, to ground the participants in practicing skills in different, contextually relevant scenarios is recommended (Dunlap et al., 2000). The case study format allows an in-service training to move past the traditional approach to training behavior intervention, towards a more holistic, person centered approach to skill transfer (Dunlap et al., 2000).

In summation, context embedded in-service training in a workshop format where participants can collaboratively practice skills by exploring different scenarios or case studies will maximize the potential for successful skill transfer (Joyce, 1980; Lave, 1991; Dunlap et al., 2000; Vygotsky, 1978).

Coaching

The literature suggests that the impact of professional development or in-service training may be enhanced by providing subsequent coaching to allow participants to practice applying their skills, to receive feedback, and to explore challenges (Joyce, 1980). Many forms of coaching are explored in the literature. It appears that the common purposes of coaching include increasing the quality of skill transfer, improving the capacity of the recipient to use the skills in a variety of contexts, and to encourage the permanence of new skills (Denton, 2009).

Coaching as a tool for ongoing, context-embedded, professional development has only become more widely used and accepted over time, with advocates including teachers, administrators, legislators, and more (Denton, 2009, Joyce, 1980). A major driver behind the growing use of coaching as a training tool is research showing that staff benefit most from professional development that devotes significant time to going in depth into the material (Garet, 2001). This level of prolonged engagement is more likely to occur in a coaching context, and therefore coaching can be used as an effective tool for creating lasting impacts on staff performance (Garet, 2001).

The broad applicability of various coaching techniques has led to a large body of research into specific modalities and practices that may increase the impact of coaching in a given field. Coaching has been shown to be an effective method for building capacity of school staff to intervene effectively with behavior on both a systemic and individualized level (Hershfeldt et al., 2012) For instance, the PBIS Plus coaching model was effective in increasing teacher capacity for managing behaviors inside the classroom in 42 elementary schools over three years (Bradshaw et al., 2012). The PBIS plus model uses a blend of coaching tools from the technical, collaborative and reflective coaching models (Hershfeldt et al., 2012). Technical coaching

involves a cycle of planning, execution, and reflection, during which the coach focuses on building the capacity of the staff to implement new practices or skills in a specific context.

Technical coaching is an effective tool for supporting or extending the lessons learned during a previous professional development activity, such as an in-service training (Denton, 2009).

Collaborative coaching takes a problem solving approach to partnering with a staff to explore challenges that they are facing in their context. The collaborative coach facilitates an exploration of possible solutions that leads to the development of an action plan, which the staff may then use to address the problem (Denton, 2009). Reflective coaching is designed to engage staff in an examination of the underlying beliefs and knowledge that define the manner in which they engage with their practice. The reflective practice encourages staff to build new understanding of their context and capacities that may then lead to improved performance (Denton, 2009).

This blending of coaching strategies has been widely implanted as a “student-focused” model, where the intended outcome is “to guide teachers in the development of plans to support student success” (Denton, 2009). In this context, coaches use a variety of techniques that include observation and feedback sessions, modeling the use of tools and evidence based practices, and delivering formal professional development (Hershfeldt et al., 2012). This model was designed explicitly for training school staff in how to understand and use functional behavioral assessments, to create and implement behavior plans, and to explore and implement a range of behavioral interventions.

Conclusion

The literature summarized above shows that effective behavioral intervention is an essential component of student learning. Effective behavior intervention requires both a

theoretical framework for selecting interventions, and specific behavioral intervention strategies. Functional Behavior Assessment is a powerful evidence based practice that provides a theoretical framework for selecting behavioral interventions. There are a variety of specific behavioral intervention strategies that can be used to directly intervene with student problem behavior. Additionally, there is evidence that training paraprofessionals in effective behavioral intervention can result in decreases in student problem behavior.

Professional development in behavior intervention is most effective when it is context embedded and collaborative in nature, including opportunities to both practice skills and consider specific cases that may then be generalized to new situations. The student-focused coaching model allows staff to extend their learning beyond the PD, and to receive vital support in the form of ongoing observation, feedback, and reflection to encourage skill integration.

The research summarized above provides a clear argument for the intervention that consists of pairing rigorously planned in-service training with student-focused coaching to train participants in both FBA and specific behavioral intervention strategies.

Theory of Action

Problem of Practice	Literature Review	Intervention	Expected Outcome
<p>Student problem behaviors are interfering with student learning</p> <p>Behavior Team (BT) has not been trained in evidence based intervention strategies to decrease student problem behaviors</p>	<p>Functional Behavior Assessment (FBA) as an evidence based theoretical framework for selecting interventions</p> <p>Evidence based tools/strategies for effective behavior intervention</p> <p>In-service training for behavior intervention</p> <p>Student-Focused coaching for skills transfer</p>	<p>BT staff receive three in-service trainings on FBA and Intervention Strategies</p> <p>BT participate in three coaching cycles to improve skill transfer</p>	<p>BT will demonstrate understanding of the FBA theoretical framework and Intervention Strategies</p> <p>BT will be observed using FBA framework to select interventions</p> <p>BT will be observed using intervention strategies</p> <p>BT will report improved ability to intervene with student behavior problems</p>

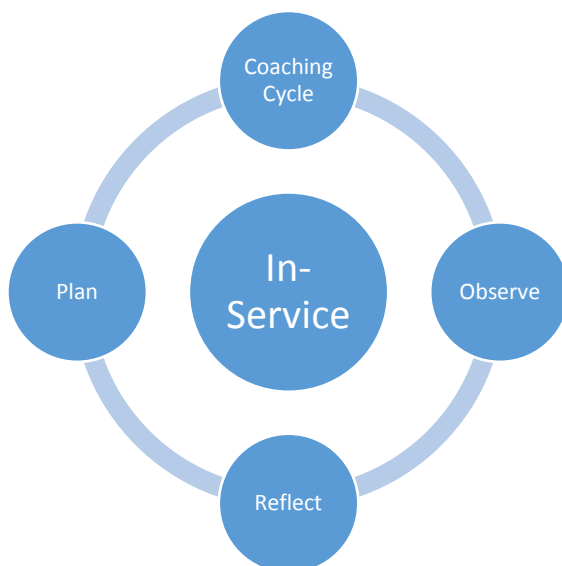
The intervention that was designed was based on the research above regarding FBA methodology, evidence based intervention strategies, in-service training, and coaching. The purpose of the intervention was to improve the ability of the Behavior Team to effectively intervene with student problem behavior. The ultimate goal of building this skill set is that the BT will decrease the frequency and length of student problem behaviors at ABC Academy.

Intervention Design

The broad design of the intervention was to provide an initial in-service training teaching FBA principles and intervention strategies, followed by three coaching cycles for each

participant, including observation, feedback and discussion, and space for reflection and planning.

Figure 1: Intervention Design Diagram



The initial in-service training was designed based off of the data from the pre-observations, interviews, and surveys that participants completed, as well as my own experience as a trainer and practitioner. Additionally, this portion of the intervention was designed to include many of the elements of effective professional development, such as context-embedded learning, collaborative and hands-on activities including scenarios and role playing, and drawing from case studies to highlight key points (Joyce, 1980; Lave & Wenger, 1991; Vygotsky, 1978; Dunlap et al. 2000). The pre-interviews included a review and self-assessment of current skills based on a skill rubric (found in Appendix A) that was developed from the Bergenfield School District's Paraprofessional Evaluation Rubric. At the first training session, the Participants reviewed the goals of the intervention as well as their current baselines identified by the self-assessment and observation data. The training was designed to provide a broad overview of the Functional Behavior Assessment terminology and methodology for selecting interventions,

focusing attention on key concepts such as Antecedent, Behavior, and Consequence/Function. BT members were taught this material through direct instruction, and then split into groups in order to practice identifying the different components of the process by applying it to a student and situation that they self-selected. Participants were asked to demonstrate their understanding of the basic principles of FBA through dissecting a specific incident and receiving feedback both from the trainer and each other. Following this activity, they were then presented with supplemental training material focused on Intervention Strategies. This portion of the lesson was more practical, or hands-on, in nature, providing participants with a toolbox of intervention strategies in the following areas: Counseling; Active; Motivational; Interruption; Crisis; Group; and Guided Self. The BT participants were asked to explore and use the intervention toolbox to reflect on which of the strategies might prove useful in the situation they had selected, and they role played how they would select and use interventions in the moment.

Following the initial in-service training, the coaching cycles were begun with the five participants in the study. The first component of the coaching cycle consisted of a 30-45 minute observation of each BT member while they worked with students. Due to the flexible and reactive nature of their role, it was not possible to schedule observations of their work with targeted students. Instead, together we chose to schedule observations at different points of the day where there is a high frequency of student behavior challenges, such as lunch, transition, advisory periods, etc., in order to maximize the opportunities for intervention and data collection. During the observations, low-inference data was collected as evidence of the staff's reactions and responses to student behavioral challenges.

In order to focus the observations for data collection regarding the FBA and Intervention skills identified in the literature as having the greatest impact on student behavior, a data

collection tool was designed from an amalgamation of the Practical FBA Training Manual for School Based Personnel (Loman & Borgmeir, 2006), and the Targeted Intervention Manual (PBIS.org). After the first round of observations and coaching feedback, the tool was updated to simply capture data around staff interventions and student responses, and to gather additional relevant contextual information that may have affected the staff's choices, such as what the ratio of staff to students was in the environment, the type of activity taking place, etc. Once the data from the first observations was reviewed and coded, the data collection tool was updated further to include documentation protocols for a wider and more specific range of staff interventions and student responses.

Following the observations, both the staff and the observer completed a brief reflection form looking back on how the staff used the FBA methodology and variety of Intervention tools during the period of observation. This reflection tool was designed to gather data around participants' opinions and interpretation of their use of the target strategies, which would then be revisited during reflective coaching session to follow.

Coaching sessions consisted of four parts. First, the coach and staff compared and reflected on the completed reflection forms. During this portion of the coaching the staff was encouraged to be thoughtful about their training thus far, and to identify areas that could use further exploration or support. Second, this was followed by a review and discussion of the low-inference observation data, including a brief feedback session regarding the observation form and coding formula. The researcher then provided technical support with skill integration to advance the staff's understanding of the target practices, providing direct instruction and collaborative discussion regarding the identified areas of need for further training and explanation. Finally, the staff identified next steps with the coach's guidance, and set logical,

short-term goals for changing practice. As indicated in the literature, the coach attempted to balance reflective and technical coaching strategies to increase the probability of lasting skill transfer.

At the end of each coaching session, the participants completed a brief questionnaire allowing them to provide feedback into the process and shape their future coaching sessions. The scope of this intervention allowed for three full cycles of observation and feedback for each participant.

After the in-service training and the initial round of observation and coaching, it became apparent that the staff would benefit from additional training in the material. Specifically, staff feedback indicated that while they had a good working understanding of the training material in an abstract sense, they had some difficulty finding ways to apply it in their everyday work with students. As a result of this data, the intervention was modified to provide additional professional development targeting the identified gaps in their practice, and was delivered in the form of two additional in-service trainings. Both of these supplemental trainings were designed in a hands-on, workshop style where BT participants were able to work with the material in concrete ways. Case studies and scenarios were taken from the observations, and were brought to the group for exploration, allowing the staff to build deeper connections with the material due to familiarity with the context. The staff analyzed the case studies, using the FBA framework, and then reviewed the scenarios while focusing specifically on the staff role in selecting and providing intervention strategies in the moment. The staff was able to give and receive feedback on their intervention choices, and participate in small group brainstorming of alternate approaches.

At the conclusion of the intervention staff completed a post-survey as well as participated in exit interviews to assess any changes in their attitudes and practices, identifying areas of growth and areas of ongoing development based on the skill development rubric as well as other data points that stood out to them.

Intervention Action Plan

Date	Component	Activities	Purpose
3/17	Pre-survey & Skill Rubric	Participants complete pre-survey independently prior to in-service or coaching, and also review the skill rubric	Gather baseline data about participants knowledge of FBA and behavior intervention
3/17	Pre-observation	Coach observes participants prior to in-service or coaching using observation tool	Establish baseline for current intervention practices using observation tool
3/17	Pre-interview	Coach conducts and open-ended interview with individual participants to review data from pre-survey and pre-observation	Identify relative strengths and needs to better shape in-service training and coaching Obtain data about communication style and collaboration capacity
3/24	State of the Behavior Team meeting	Review baseline data as group and goals for intervention cycle	Build consensus around goals for intervention cycle, create a shared vision for what the work is and how goals will be achieved Observe participants' sense of confidence in their capacity to meet the goal, as well as their enthusiasm for the process
3/31 4/14 4/21	In-service training <i>2nd & 3rd training dates were added based on process data</i>	Coach leads in-service training reviewing FBA process and Intervention Tools	Orient all participants to the model for effective behavioral intervention

		Participants collaboratively explore the material through case study and other exercises	Gauge individual participants understanding of the material Describe indicators for progress
4/7 4/14 4/21 4/28 5/5 5/12	Coaching cycles <i>Observation Tool was updated during the study as a result of feedback and process data</i> <i>As discovered as part of process data, and due to the large group and variable schedules of staff, the coaching sessions were staggered</i>	Coach facilitates three cycles of ‘student-focused’ coaching with each participant including the following components -pre-conferencing -observation -reflection form -feedback -guided reflection -technical support with skill integration -problem solving and planning support	Gather data around participant use of effective behavior intervention Identify successes and challenges to further shape the coaching process to increase skill transfer Provide feedback regarding use of model for effective intervention
5/19	Post-survey & Skill Rubric	Participants complete post-survey independently at end of cycle	Gather information about participants knowledge of the material
5/19	Post-interview	Coach conducts an open-ended interview with individual participants	Identify participants perceptions of their growth towards stated goals Receive feedback about the coaching process

Research Methods

There were eleven total team members in the BT cohort for this school year. When given the choice to receive more extensive training and support for their role, five team members volunteered to participate in this intervention. These five volunteer participants each held slightly different roles and responsibilities at the school, with the major commonality being that they mutually share the responsibility for managing student behavior school wide. Additionally, each of the five BT members had significantly variable differences in prior training and experience.

Participant A had been in at this school in a similar role for almost eight years, and had received a significant amount of training and support over his tenure. Participants B and C had the experience of being previous students at this school, having completed middle school and high school there prior to being hired into their roles. Participant C had two years of experience in their role, while Participant B had three. Participants D and E were new to the field and newly hired to their roles.

Data Collection Plan

A variety of data was collected throughout the process of this intervention, both to monitor the overall effect of the intervention as well as to increase the probability of lasting skill transfer by identifying helpful modifications to the design of the intervention. Data collection methods included surveys, observation, interviews, coaching transcripts, as well as a reflective research log. The research questions that guided the collection of data were:

1. Do Participants know and use the FBA decision making framework to select interventions?
2. Do Participants know and use a variety of intervention strategies to manage behavior problems?
3. Will these decision making and intervention tools improve Participants' confidence in their ability to intervene with behavior problems?

Impact Data

Impact data for this intervention was collected in a few ways. The major forms of data collection were targeted to assess the expected outcomes of the intervention: that team members would demonstrate their understanding of both FBA vocabulary and a wide range of interventions; that they would actually use the FBA framework when selecting interventions in their practice; and that team members would report improvements in their ability to intervene with students' problem behaviors.

The main forms of impact data that were collected were:

- **Pre/Post Surveys:** Completed online, used to measure the impact of the intervention overall, as well as to are the in-service trainings and the technical aspects of the coaching practice.
- **Pre/Post Interviews:** Facilitated via a protocol designed to increase objectivity and consistency in the interview process, used to set a baseline and measure progress over the course of the intervention (found in Appendix C).
- **Skill Rubric & Self-Assessment:** Completed at the end of the interviews, based off a rubric designed to measure skill development in the target areas
- **PD Exit Surveys:** Completed online, and used to identify areas of growth and need in staff's understanding of the material
- **Observation Data and Reflection Form:** Observations were facilitated via the observation protocol, and coded using a matrix that participants and coach collaboratively agreed upon. The reflection form (found in Appendix D) was completed by both the coach and staff for use in comparison during the coaching sessions.
- **Coaching Sessions and Questionnaires:** Edited transcripts were generated and coded to measure changes in staff knowledge and practice. Questionnaires were used to shape future coaching sessions and identify areas in need of extra support
- **Researcher Reflective Journal:** Regular documentation of researcher notes following a consistent format (found in Appendix E) to look at both impact and process data, as well as research tools themselves.

As the majority of the data related to this intervention was qualitative in nature, it was necessary to use triangulation to increase the validity of the measures of expected outcomes (Craig, 2009).

As indicated below, multiple data points were identified and used to gauge the impact of the intervention on the three major expected changes.

Expected Change	Data Source 1	Data Source 2	Data Source 3
BT will demonstrate knowledge and understanding of the FBA framework and Intervention Strategies	Pre/Post Surveys & Interviews	PD Exit Surveys	Coaching transcripts and questionnaires
BT will use FBA framework to select and use interventions	Observations and Coaching Transcripts	Reflective Journal	Self-Assessment on Skill Rubric
BT will report improved ability to intervene with student behavior problems	Pre/Post Surveys, Interviews, and Self Assessment	PD Exit Surveys	Coaching transcripts and questionnaires

Process Data

The data gathered during this process influenced the design and implementation of the intervention during the cycle, and these data points were essential to its ongoing development: the Researcher Reflective Journal; the PD Exit Surveys; and the Post-Coaching Questionnaires.

The reflective journal is a valuable tool in the action research process (Craig, 2009), and was used in this instance to record ideas that influenced the ongoing design of the intervention, such as identifying strengths and weaknesses of the intervention, exploring specific means of course correcting in the midst of the intervention, as well as thinking through strategies to improve both the experience of the participants and sustainability of any skills transfer.

The exit surveys conducted at the end of each in-service professional development provided valuable insight into what teaching strategies were most effective in communicating the material to the group. For instance, one important consideration that came up as a result of the PD exit survey noted that most of the staff had not participated in formal professional development in this field, and that they needed additional time to work with the material.

The post-coaching questionnaire provided necessary insight into the value of the coaching process, creating a space for the participants to give feedback and influence their learning process.

Data Analysis Methods

Quantitative data from the surveys, self-assessments, and observation forms were aggregated and sorted for relevant patterns. Qualitative data sources, such as staff interviews and coaching sessions were transcribed. In order to effectively analyze the qualitative data, codes were generated from the essential components of the theory of action, and the transcriptions were coded in order to identify relevant themes, patterns, and outcomes. A sample of this coding appears below, with more detail found in Appendix F.

ARP Codes		Definition	Example
Antecedent-General Reference	A-G		
Antecedent-Academic Expectation	A-A	Academic expectations trigger a behavioral response	Complete assignment
Antecedent-Behavior Expectation in Class	A-BC	Behavioral expectations in classroom trigger behavior	Sit down Where is your hall pass
Antecedent-Behavior Expectations in Hall	A-BH	hallway expectations trigger a behavior	Where is your hall pass
Antecedent-Peer Interaction	A-P	Peer interactions trigger a behavior	Jokes Insults
Behavior-General Reference	B-G		

Behavior-External	B-E	Behavior that presents externally, towards the environment or context	Disruption Defiance
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Data Analysis and Findings

The data collected during the process of this intervention was analyzed in order to identify any impacts on the participants' knowledge and use of FBA processes and Intervention Strategies. The research questions that guided this analysis include:

4. Do Participants know and use the FBA decision making framework to select interventions?
5. Do Participants know and use a variety of intervention strategies to manage behavior problems?
6. Will these decision making and intervention tools improve Participants' confidence in their ability to intervene with behavior problems?

Additional data analysis was conducted to identify strengths and weaknesses of the project design. The findings of the data analysis are described below.

Impact of the Action Research

The intervention conducted during this action research process studied the effects of training and coaching staff to use the FBA framework to select and use Intervention Strategies when working with students' challenging behaviors. The hypothesis guiding the action research proposed that pairing in-service training with a series of supplemental reflective and technical coaching cycles would allow participants to learn and use the strategies to better respond to student misbehavior.

During the course of the research, the following five learning targets were used as measures of the intervention's impact:

- **Knowledge of Functional Behavior Assessment:** The evidence showed that most participants significantly increased their understanding of the FBA process.
- **Use of the FBA theoretical framework to select interventions:** The evidence showed that staff made some changes to their intervention selections as a result of the intervention, but their confidence in applying the FBA methodology did not increase as much as expected
- **Knowledge of Intervention Strategies:** The data showed that most staff significantly increased their knowledge of a variety of intervention strategies to address student behavior issues.
- **Use of Intervention Strategies:** Most participants demonstrated use of a wider range of intervention choices in their practice, however some participants did not.
- **Improved confidence in managing student misbehavior:** Most participants reported significantly increased confidence in their abilities to intervene with challenging student behavior. It is unclear if this increased confidence resulted in improvements in student behavior.

The findings associated with the above learning targets are discussed in detail below, with supporting evidence to explain how the conclusions were arrived at. Additional findings related to process data, regarding intervention design, challenges to implementation of the intervention, and other possible remediating factors will also be discussed.

Knowledge of FBA Methodology

Over the course of this intervention, all five participants demonstrated increases in their knowledge of FBA vocabulary and methods as measured through observation and transcript analysis, and showed increases in the frequency of using the terminology appropriately when

speaking about their own practice. Specific vocabulary learning targets included the following terms: Antecedent, Behavior, Reinforcing Consequence, Function, and Replacement Behavior.

Research Questions	Learning Targets	Pre-Intervention	Post-Intervention	Finding
<i>Knowledge of FBA</i>	Understanding vocabulary	Participant A had some basic knowledge of FBA Vocabulary Participants BCDE had no understanding of FBA Vocanulary	Participants ABCDE understand FBA vocabulary	The intervention was effective at teaching FBA Vocabulary
	Using Vocabulary	Participants ABCDE did not use any FBA vocabulary when discussing student behavior	Participants ABC use FBA Vocabulary regularly and accurately Participant D, E do not use the vocabulary accurately	The intervention was

Understanding the vocabulary: Participant A stated that he had been previously trained in some of this material and that he was familiar with the terminology. After the initial in-service training, he correctly defined the target vocabulary and was able to identify examples of the terms in a given scenario. Participants B, C, D, and E all indicated that they were unfamiliar with the FBA process and vocabulary at the beginning of the intervention. After the first in-service training, participants B and C were able to accurately define the vocabulary terms, as well as identify examples of the terms in a given scenario. Participants D and E did not correctly define the terms or identify the examples in the scenario at this early stage. At the conclusion of the

second in-service training, Participants D and E were able to define the terms and identify examples. In the words of Participant D, “the Antecedent is everything that led up to the situation, right, and you can use that to figure out why it happened.” This evidence indicates that the in-service training was an effective tool for increasing participants’ understanding of key terminology in the FBA model.

Using the vocabulary: During the initial coaching session, Participant A did correctly use the terminology with some prompting. He was able to identify instances where he had noticed a student’s antecedent behaviors, and he was able to reflect on the possible functions of the problem behaviors that were observed. During the final coaching session and in his exit interview, Participant A was able to independently use the target vocabulary in accurate and appropriate ways. For instance, when talking about his progress on his self-identified goals, he described an interaction he had with a teacher after bringing a student back to class in this way:

“I brought him back in and explained to her that the reason he was disrupting her class, you know, the function of his behavior, was so that he could get out of doing his work. Basically, by kicking him out of the class, she was giving him what he wanted, and that means he’s just going to keep doing it.”

Over the course of the study Participant A did not show as much growth as other participants in his use of the terms, however he did begin with the highest baseline ability in the research group, as indicated by his Pre-Interview and Self-Assessment, which may explain the smaller increase. Participants B and C were both able to use the target vocabulary when prompted during their initial coaching sessions, however they did not use the terms completely accurately. For instance, Participant B frequently used the term Antecedent when describing a student’s Behavior. Also, Participant C independently described a student’s Consequence, but he was referring to a programmatic consequence such as detention rather than the more nuanced idea of the

Reinforcing Consequence. By the end of the intervention cycle both Participants B and C were able to independently and accurately use the target vocabulary with fluency, showing significant growth. Participants D and E both had difficulty using the target vocabulary in their initial coaching session, and it was clear that they did not fully understand the terms or processes. After subsequent in-service training and coaching sessions, Participant D demonstrated significant increases in his independent and accurate use of the terms, however there continued to be semi-frequent instances of inaccurate term usage as far into the intervention as the exit interview. Participant E showed the least amount of change over the course of the intervention, and by the end of the intervention he was not able to independently use the target terminology, as evidenced by this statement in his exit interview, “the consequences here just aren’t bad enough to make them stop.”

Use of FBA Methodology

Measuring participants’ use of the FBA methodology to select interventions proved to be challenging. Observation data was coded and analyzed to draw connections between observable student behaviors and staff’s subsequent interventions, however this approach was not able to draw down on the actual thought process leading to the staff’s choices. There were instances where the observer noted that a staff selected and used an intervention that appeared to match the Function of the student’s behavior, but in later discussion the staff reported that they did not think about Function in that instance. Despite these data collection challenges, the available evidence, gathered from the transcribed coaching sessions and the Researcher Journal, showed that four out of the five participants did increase their use of the FBA methodology when selecting interventions.

Research Questions	Learning Targets	Pre-Intervention	Post-Intervention	Finding
<i>Use of the FBA Framework</i>	Intervening Early	Participants A, B intervening at early signs of escalating behaviors Participants CDE not intervening early or at all	Participants ABCD able to intervene early Participant E not intervening early	Intervention is most effective with moderately experienced staff
	Replacement Behaviors	Participant ABCDE not offering replacement behaviors	Participants ABC offering replacement behaviors Participant DE not offering replacement behaviors	Intervention is most effective with moderately experienced staff

When to Intervene: During the initial observation, Participants A and B were both observed to be intervening with what appeared to be less severe behaviors. In fact, Participant A spent most of the observation period proactively engaging in motivational and counseling interventions designed to build relationships and create a positive atmosphere, even at the expense of ignoring some low level behavior problems. In the subsequent coaching conversation, Participant A described that he has been getting better results by working with smaller behaviors and creating personal connections to students: “The way I like to do it, I try to catch them doing good, and then when something does eventually go wrong they trust me because of the relationship.” When discussing this strategy in light of the FBA process, he thought that he was intervening with students during the antecedent phase, or even before the antecedent phase, in an

attempt to stave off possible problem behaviors. This approach falls within the scope of what the literature would find to be good practice (Fecser, 2015, Sprinson 2010), however it speaks more to the inherent abilities of Participant A rather than a specific outcome of coaching or in-service training.

Participant B was observed to be targeting low level disruptive behaviors as his primary area for intervention, such as a student yelling in the cafeteria, running through the cafeteria, or poking a peer in the side, at which point Participant B would intervene with the student. In subsequent observations, both Participants A and B persisted in their efforts to intervene early with students after first seeing Antecedent behaviors. This finding suggests that Participant B was actively using the FBA framework to identify when and how to intervene, whereas Participant A was doing the same thing but for slightly different reasons.

On the other hand, Participants C, D, and E initially appeared to be oriented towards more severe behaviors, and they took a reactive approach to behavior intervention. Participant C later described his approach as “looking for the frequent flyers” and intervening with them when they “took it too far.” Participant E reported a similar approach to his intervention timing. During the coaching conversations afterwards, Participant C was able to self-identify that he was not intervening early when he saw Antecedent behaviors, and that he would attempt to shift his strategy. Participant E did not feel there was a good reason to change his approach. Participant D, on the other hand, reported that he was responding to behaviors as soon as he saw them, and that he valued early intervention, indicating that he needed additional training to be able to recognize early signs of behavior challenges. Throughout the course of the study, Participants C and D were observed to begin intervening when they witnessed lower level behavior challenges that could be Antecedents to further problems. This indicates that the intervention positively

impacted their ability to identify Antecedents and their ability to intervene early. Participant E persisted in both his philosophy and approach to intervening with student behavior, typically waiting until the problem behavior became fairly severe before initiating an intervention.

The ability to successfully identify Antecedent behaviors and use that data to make a decision about whether or not to intervene is a complex one. On the Self-Assessment, Participants A and E showed the least amount of change in this area over the course of the Intervention, rating themselves the same in both the pre and post assessments. This perceived stability was also reflected in noted in the research journal, providing further support for the finding that they did not experience as much growth in this area during the study. Participants B, C, and D each scored themselves higher after completing the intervention. Participants B and C both moved themselves from ‘proficient’ to ‘distinguished,’ while Participant D moved his rating from the initial ‘basic’ into the ‘proficient’ range. As Participant A had years of experience in his role and Participant E was less engaged in the intervention and did not agree with parts of the model, the difference in these self-assessments leads to a finding that the intervention may be most effective when targeting somewhat less experienced staff who have an open-mind and a willingness to learn new skills.

Identifying Replacement Behaviors: The ability to identify an appropriate Replacement Behavior requires the participant to use their understanding of the Consequence, or, their ability to identify the function of the behavior. If the staff identifies the function correctly, they will be able to offer a Replacement Behavior that meets the same need. Participants A, B, and C all showed growth in their ability to identify appropriate Replacement Behaviors, for the students they intervened with, as indicated by the Observation Tool and Researcher Journal. In the final round of observations, the data indicated that these three participants were attempting to identify

the function of the students' behavior. These three Participants were then observed offering Replacement Behaviors that matched the same function. The coding of the observations and coaching sessions for these three participants showed increases of at least 40% by the third coaching cycle in the areas of 'questioning students' perceived needs,' as well as 'offering alternatives.' For example, Participant B was observed to intervene with a student who was yelling and cursing in class. Participant B brought the student to the back of the room to provide counseling, and through discussion he identified that the student was trying to escape from the responsibility of doing his assignment. Participant B then talked with the teacher to explain that he would meet the student's need if the student could ask appropriately for a break, and then he also explained this to the student. The student continued to be belligerent for a little while, but he soon saw that he was not being sent out of class for the disruptive behavior, calmed himself down, and then appropriately asked for a break. The break was a Replacement Behavior that met the same Function, allowing the student to escape from the work but in an appropriate way.

When asked about how he felt he had handled the situation, Participant B responded with:

"I could tell he was trying to get out class, and the teacher wasn't letting him because of how annoying he was being. Part of me didn't want to give in to his disruption, but then I thought about what we've been working on, especially how kids don't really care about getting in trouble so long as they get what they want, and then I thought I should try and help him do it the right way... To be honest, I didn't like how it felt, giving in, but it did work better and he only took a short break."

Participant D did not show the same level of growth in this area, and continued show mixed outcomes when identifying both behavior function and replacement behaviors. Data from observation and coaching transcripts indicate that, after three coaching cycles, he had a ~10% increase in 'questioning students' perceived needs', as well as a 22% increase in 'offering alternatives.' In coaching, he presented as motivated and interested in applying the material, but his confidence and execution remained low. The majority of his coaching time was spent on

more technical matters, as he frequently would pause to ask questions or for clarification on a concept he was grappling with. This evidence, combined with the knowledge that he was new to the field and to this role at ABC Academy, indicates that Participant D would have benefited from less theoretical and more practical or actionable support.

Participant E consistently took a different approach to identifying Replacement Behaviors. When confronted with a problem behavior, his go-to intervention was often to remind the student of the rule that was being broken, and to assign a consequence. In coaching, Participant E was able to identify some possible functions to the behaviors he was working with, but this did not result in him using that information in a meaningful way when working with students. This evidence suggests that Participant E did not agree with the FBA portion of the study, and did not feel motivated to change his decision making framework.

Knowledge of Interventions

Participants A, B, C and E initially scored themselves at ‘Proficient’ in Intervention Strategies on the Self-Assessment Rubric, while Participant D scored himself as ‘Basic.’ Despite these initial high grades, only Participant A reported having received any formal training in Intervention. This indicates that most of the participants began with high confidence in their intervention skills, regardless of any training. At the end of the study, the data from the Self-Assessments, Post-Interviews and observation/coaching transcripts, indicated that all five of the Participants had increased their knowledge and understanding of the range of Interventions.

Research Questions	Learning Targets	Pre-Intervention	Post-Intervention	Finding
<i>Knowledge of Interventions</i>	Understanding vocabulary	Participants ABCDE show middling to low understanding of variety intervention strategies	Participants ABCDE know and understand a wide range of interventions	The interventions was effective at teaching intervention vocabulary
	Using Vocabulary	Participant A, B able to describe some regularly used interventions Participant CDE not able to describe interventions	Participants ABCDE showed significant increases in accurate usage of intervention vocabulary	The interventions was effective at teaching intervention vocabulary

Understanding the vocabulary: After the initial in-service training, it became clear that this material was particularly accessible to the participants, as all five of the participants gave positive feedback for this portion and they were able to successfully define and remember many of the Intervention Strategies. The exit-survey from the training asked participants to name and explain the interventions that stood out to them, and all five participants were able to list eight interventions or more. In the Post-Interviews and coaching transcripts, Participants B and C showed the greatest increase in understanding the range of Interventions. For instance, in the pre-interview Participant B described just four interventions that he frequently used, and at the post survey he listed off twelve. Across his three coaching sessions, he was found to have an understanding of upwards of thirty interventions. The finding that all of the participants increased their understanding of the range of interventions may indicate that the study was an effective tool for teaching intervention strategies. Alternatively, it may also indicate that

Participants simply learned or became aware of how to describe interventions that they already knew, rather than this study imparting them with new knowledge.

Using the vocabulary: While Participants A, B, C and E all started out with fairly high baselines for naming and describing the interventions, as indicated by their Self-Assessments and exit surveys. During coaching sessions, they also showed an increase in frequency and variety of interventions named over the course of the study. Participant C in particular took an active role in discussing the merits of different interventions, and as a result his data appeared to be something of an outlier when compared to other participants. For instance, the transcript from his first coaching session shows him using the word ‘intervention’ over 25 times, and in his final coaching session he described a complicated sequence of intervention choices that the Observation Tool did not manage to pick up. When asked about how he managed to keep track of all of these interventions, he said, “I carry the list in my pocket,” and pulled it out for display. Participants A and B also showed increasing use of the intervention vocabulary over the three coaching cycles, particularly in the Motivational and Counseling intervention categories. This evidence suggests that for Participants A, B, and C, the study had a positive impact on their ability to use more technical vocabulary to describe the interventions they use.

While he was able to use the vocabulary appropriately in his exit surveys, Participant D started with a low baseline for being able to name and describe interventions on his self-assessment and from the initial coaching session. Despite this, he did show a distinct increase in frequency over the course of the intervention. In his first coaching session, he used some version of the term Intervention nine times, and six of those were directed as questions towards the researcher. In the post-interview, he had 11 instances of using a term to reference an intervention, and he described in detail seven distinct interventions that he had used during the

study. The variety of interventions that Participant D discussed remained low throughout, tending to be focused primarily on Counseling and Group interventions. Participant E began the study with a high baseline ability for discussing the uses of a variety of interventions, as noted in his self-assessment and exit-surveys, but over the course of the study he actually decreased the variety of interventions he would speak about, and focused mostly on Interruption interventions and consequences.

Use of Interventions

One major expected outcome of this study was that participants would not only learn but be able to use a wide range of Intervention Strategies. The data collected from the observation tool, the coaching transcripts, and the Researcher Reflective Journal, provides evidence indicating that four out of the five participants showed increases in the variety of Intervention Strategies that participants were able to use when responding to student problem behaviors.

Research Questions	Learning Targets	Pre-Intervention	Post-Intervention	Finding
<i>Use of Interventions</i>	Variety	Participant ABC demonstrated use of interventions in preferred categories Participants DE did not use a variety of interventions	Participants ABCD expanded repertoire of interventions used appropriately Participant E did not change intervention practices	Action Research was effective at teaching variety of interventions
	Quality	Participants ABC received mostly positive outcomes as result of interventions	Participants ABCD showed improved outcomes with a wider range of intervention choices	Action Research was somewhat effective at improving outcomes of interventions

		Participants DE receive mixed outcomes as result of intervention	Participant E did not change practices	
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Variety of interventions: Participant A was initially observed to have significant facility with both Counseling and Motivational Interventions, such as Validating Feelings, Brief Goal Setting, Processing, and more. In the subsequent coaching session, Participant A also expressed knowledge and facility with other forms of interventions, but that he favored Counseling and Motivational Interventions because of the types of relationships that they allowed him to build. He stated that he tried to “kill them with kindness,” when asked about his clear preference for relationship building interventions. Over the course of study, Participant A identified goals for himself to experiment with a wider range of interventions, and data from the second and third observations as well as notes from the Researcher Journal indicate that there was an increase in the variety of interventions used, including more Interruption, Active, and Group Interventions. This indicates that, over the course of the study, Participant A did increase the variety of his regularly used interventions to include strategies from three additional categories, suggesting that the study was an effective training tool for building intervention skills.

Participant B had a similar process, starting out with a fairly strong set of interventions in the Counseling and Interruption categories, and over the course of the coaching cycles he expanded his repertoire and began using more Motivational, Active, and Group Interventions. The observation tool and researcher journal both show that his use of motivational interventions improved from four instances in his first observation to nine in his last observation. Additionally, in his first observation he used the phrase “good job” three separate times, whereas in the final

observation he offered more in depth praise. There was a situation during the third observation where a youth had just walked away from a conflict on the basketball court where another peer had pushed him and called him stupid, and Participant B praised him by saying:

“Hey man, I’m glad you came over here. I saw that you walked over here taking deep breaths, so thanks for calming yourself down like that, I know it’s hard, but it’s just basketball and you’re having a good day so don’t worry about it.”

This instance of praise showed that Participant B was putting more thought into the delivery of his praise, attempting to individualize it so the student can receive clear feedback about what behavioral choices were successful. The above evidence suggests that Participant B was effectively using a wider range of range of interventions, and that he also improved the quality of his interventions.

Participant C was initially observed to be using primarily limit setting and Interruption interventions when confronted with problem behaviors, however over the course of the study he was able to demonstrate a wider range including interventions from the Active, Counseling, Motivational categories, also including one additional instance of using Crisis Communication. He reported that the big change for him came from reorienting his approach to intervention away from reactive and more towards the proactive. During his exit interview he summed this up by saying, “why should I keep waiting for them to mess up when I might be able to stop it from happening in the first place? It just makes more sense this way.” This indicates that Participant C experienced a shift in his decision making framework around behavioral interventions.

Participant

Participant D started out with the most limited range of interventions out of all of the participants, using primarily the Verbal Prompt and Clarify Expectations interventions from the

Interruption category. In the second and third observations, he was able to use a few Counseling and Group Interventions that he had planned for during in his first coaching session. He had a very significant increase in the amount of Motivational interventions used, with twelve instances of praise and positive reinforcement recorded in his final observation. He self-reported that his success with providing frequent praise and encouragement for his students, had increased his confidence and willingness to try other interventions. He stated that “the motivational interventions are really helpful, and I am using them more and more, and it seems to make it easier for them to listen to me when I really need them to do something.” This evidence suggests a finding that the study had a direct impact on increasing the variety of interventions that Participant D used.

Participant E was observed to have a baseline ability to use Interruption interventions and some Active and Crisis interventions. When given an opportunity to respond to student misbehavior, he tended to wait until it became a significant issue and then label a consequence for the student. Sometimes he would provide a Break for the student or direct them to Take a Walk, both Active interventions that allow for kinesthetic engagement to release tension, but after a little while he would invariably return to the consequence and limit setting. Over the course of the study, this pattern did not change significantly, although he was observed using some Counseling Interventions after a student had earned a significant consequence. When reflecting on his practice, Participant E was adamant that his students did not ‘need to be babied,’ and that they ‘need a reality check.’ This evidence suggests that Participant E did not significantly adjust his decision making framework or his practice as a result of this study, and instead persisted with his existing attitudes and beliefs about behavioral intervention.

Quality of the Interventions: During the observations, data was taken documenting what behaviors students were showing, what the context of the behavior was, at which point the staff intervened, what intervention they chose to use, what replacement behavior they offered, and finally the response of the student to the intervention. In order to measure the quality or impact of the staff's interventions, the student response data was used in conjunction with the Researcher Reflective Journal.

Participant A had fairly consistent positive outcomes with his intervention choices. When he chose to intervene with a student, they tended to accept his interventions, comply with his expectations, and modify their behavior in the directed way. Over the course of the study this trend remained consistent, and the observation data and research journal did not indicate any significant change as a result of the study. There was one notable instance during a lock-down procedure where a fairly high-needs student was wandering the halls being disruptive and trying to see what was going on outside despite the school wide lockdown protocol, and Participant A was tasked with redirecting this student to a safe area. Over the course of about seven minutes, he used a range of interventions that highlighted his knowledge. He began with straightforward clarification of the expectations, quickly moved into persuasion and goals reminders, and then attempted motivational interventions, all of which did not seem to have an impact. Participant A then initiated crisis communication and set very firm limits while labeling clear consequences for the student's choices and providing close proximity, at which point the student complied. When discussing this incident afterwards in the coaching session, Participant A felt that he had chosen his interventions poorly and was frustrated with his performance during this situation, while the researcher noted that he had demonstrated admirable self-control and versatility in a very difficult moment. The data regarding Participant A suggests that, perhaps due to his prior

experience and skill level, the study did not have a significant impact on the outcome of his interventions.

Participant B and C had similar patterns of growth, despite coming from slightly different starting points. Participant B was observed to approach most situations with questions and curiosity, attempting to identify what had triggered the student, and what their perceived need was. After getting a sense of the situation, Participant B tended to initiate counseling or offer the student a break. Student responses were invariably positive to these interventions, and Participant B appeared to be getting solid results. In coaching, Participant B identified that his interventions, while effective, seemed to take a long time, and he identified a goal for himself to use more Interruption and Active interventions that might get students back on track more quickly. In follow up sessions he reported that these interventions were also effective, and that he was finding that he could resolve situations more rapidly by taking this approach. He said, "I'm really trying hard to get them back to class more, and I know it's important to really let them calm down first, but it seems to be working." Alternatively, Participant C was initially observed to be using primarily rule reminders and consequences as Interventions, and in the first observation these intervention generated behavioral change in the targeted student about 50% of the time. Additionally, students would frequently continue their misbehavior once Participant C's attention moved elsewhere. Over the course of the study he made progress on his goal of to use a wider range of interventions. During his final observation, Participant C was observed to successfully use a range of Counseling Interventions, including One-on-One Counseling, Processing, Validating Feelings, Goal Setting, Values Reminder, and more. In the debrief of that observation, Participant C said that "It's nice not being the bad guy all the time, and it seems to work," which indicates that he developed a personal connection with tools offered in this action

research. This data indicates that the study may have helped Participant C improve the outcome of his intervention choices, either by expanding his range of tools, or perhaps by nudging him towards less confrontational interventions that are easier for students to comply with.

Participant D was initially observed to have a narrow range of intervention tools that were only occasionally effective. He frequently used Verbal Prompts and Rule Reminders, and students only seemed to respond to these interventions with about 15% of the time during the initial observation. During his final observation, he was observed to successfully use a variety of Group Interventions during his advisory period, and was generally much more dynamic with his students. He moved throughout the room, projected his voice while setting expectations, split up students who were being disruptive, and worked individually with a student who was struggling to be on task. The observation notes from that session indicate that students were responding positively to his interventions about 90% of the time. During the debrief of that observation, he tried to deflect personal responsibility for these changes by saying he “drank a lot of coffee” beforehand and therefore had extra energy, but was able to acknowledge that he felt more confident and effective with running his group after he put time in to build individual relationships with his students. This large jump in outcome data may also be due to the context, as the first observation was during a detention period with a variety of students located in a very busy cafeteria, and the final observation was in a contained advisory classroom with a small group of students he had been working with for some time. Nevertheless, the available evidence does indicate that the study had a positive impact on Participant D’s quality of interventions.

Participant E continued to be something of an outlier. He was observed to keep his intervention choices in a narrow focus, particularly using rules reminders, consequences, and judgmental statements to get students to comply with expectations. In coaching, his perception of

what was effective for students did not change much over the course of the study. This indicates that Participant E was not willing to integrate new ideas into his practice, and that the study did not create a change in his practice.

Improved Confidence in Responding to Student Behavior Challenges

In order to assess the changes in the confidence to respond to problem behaviors, comparison data from the Pre/Post Surveys and Interviews was used in conjunction with PD Exit Surveys and the Coaching transcripts. All five Participants did show improvements in their confidence levels, but in different ways. Participant A appeared to have had only a slight increase in confidence, and mostly in the area of being able to articulate his work. The difference in vocabulary he used to describe his work from the pre to the post interview was significant, and it was clear that he had learned terminology to describe his practice with much more detail. Participant B and C both had significantly improved confidence levels, felt that they had expanded their repertoires of Interventions, and that they were getting better outcomes with students. Participant D moved his ratings from 'basic' to 'proficient' in most categories of the rubric, and clearly used more positive language in his post-interview and final coaching session when describing his interventions and confidence level. Participant E rated his abilities mostly the same on the rubric, and his coaching transcripts were also fairly consistent throughout, however his post-survey indicated that he felt a distinct increase in confidence with handling difficult situations now that he had learned a wider range of intervention tools. This evidence indicates that the study did have a positive effect on participants' confidence in their ability to provide effective behavioral intervention when faced with challenging behaviors.

Research Questions	Learning Targets	Pre-Intervention	Post-Intervention	Finding
<i>Improved Confidence</i>	Improved Confidence	Participants AE expressed high confidence Participants BCD expressed low confidence	Participants AE continued to express high confidence Participants BCD expressed increases in confidence	Intervention was somewhat effective in improving confidence levels

Process Data Analysis and Findings

Challenges to Implementing the Action Research

While not part of the initial hypothesis and focus of the research, it did become clear that that there were significant challenges involved in shifting Participants' intervention practices. One significant obstacle was participants' ability to understand the material. In terms of education levels, all five of the participants were high school graduate, while two participants had gone on to complete an undergraduate degree program. None of them had attended any specialized education, training, or credentialing to help them in their roles, nor had they received significant on the job training or support. These deficits were evident throughout the study, manifesting in ways such as some participants being unfamiliar with setting professional goals, or having difficulty paying attention during the in-service trainings. Additionally, observation and coaching was a completely new support for all five participants, and three out of the five said that they felt a little bit uncomfortable and behaved differently due to having an observer present.

Finally, it became apparent that each participant had a slightly different understanding of the purpose of the study, as well as their approach to working with student behavior. The

Participants had significantly different understandings of their roles and responsibilities, which lead to variability in the impact of the study. For instance, both Participants A and B believed that their roles were responsible for supporting all students and creating a positive school culture, while Participants C and E felt that their role was meant to be focused on ensuring that students follow rules and have accountability for misbehavior. Participant C appeared to have a change in perspective during this study, moving towards a more pro-active, help all kids succeed attitude, which allowed him to benefit from the study in the ways documented above. Participant E did not change his perspective on his role or towards behavioral intervention, resulting in the significantly reduced impact of the intervention.

Design of the Action Research

In order to gather data about the effectiveness of the intervention design throughout the study, multiple opportunities for eliciting feedback from the participants were included throughout the various components. Data from the exit surveys, post coaching surveys and pre/post surveys included questions allowing staff to numerically rate and give direct feedback on the different components of the intervention. After reviewing this data, it became clear that the participants found most of the intervention to be useful and applicable, as indicated by an average of over 80% in favor on the questions ‘how strongly do you support this method of intervention’ and ‘what is the likelihood of you using this information in your practice.’ The observation tool had the unintended benefit of becoming a valuable organizational tool for staff to structure their approach to behavioral intervention. The facilitation of coaching proved to be the highest rated design component of the intervention, and there is some evidence that it helped improve participants’ skills. The in-service trainings received somewhat lower ratings in

favorability, but were still positively scored in terms of their facilitation and usefulness of handouts.

Tools: The initial observation tool was found to be not as effective as desired, and was somewhat confusing to a few of the participants. After updating it to be more clear and to include an area to record contextual information during the observations, participants reported that it was not only easy to understand but also helped them think more clearly about how to understand the process of behavioral intervention. Participant B described the observation tool as “much better than the rubric for thinking about this,” indicating that the tool had a secondary and unanticipated value. This data suggests that a valuable component of this intervention was that it provided participants with both a system and terminology for thinking about their work in more reflective and critical ways. This finding suggests that participants benefit from having a framework via which they can understand and reflect on their own practice in the moment.

Coaching: The gathered evidence from the post-coaching surveys indicates two findings related to the coaching component of this intervention. First, there is some evidence that the blend of Reflective, Collaborative, and Technical coaching practices recommended in the literature (P. A. Hersfeldt et al., 2012) was useful for the participants. Participants A, B and C, all reported that the collaborative approach to problem solving was very helpful, that they were being supported rather than evaluated, and that they benefited from the opportunity to reflect on their own practices. Participant D ended up using a good portion of the coaching time for technical support with the material, but after the third coaching session he stated that he would benefit from more time spent discussing and reflecting the observation data rather than reviewing the model of intervention and goal setting, which was an indicator that he had begun to internalize the model and started to make it his own.

Secondly, there were a few responses on the post coaching surveys and in the exit-interviews indicating that having a model for how to use the language and approach to intervention was particularly useful. Particularly, three participants explained that they benefited from listening to the researcher describe their practice, that it was helpful to have someone rephrase or reflect back their own descriptions of situations while integrating the terminology and material being taught, , and four participants agreed that further modeling could be valuable. It became clear that the majority of participants felt that they had not been adequately trained for their roles and did not know what ‘the right way to do the job’ looked like. Participants reported that the Observation Tool was useful, and that there would be benefit from being able to use the observation tool while observing each other or a more experienced practitioner. This finding indicates that a more complete training program for Behavior Team members could be useful if it included a period of mentor training or shadowing during which the mentee can use a version of the observation tool to reflect on the practice.

Professional Development: The post-surveys from the in-service trainings and the post-interviews with staff indicated that there were elements of the trainings that successfully integrated the best practices described in the literature, such as collaborative and context embedded practice, as well as the use of familiar case studies to ground the material (Joyce, 1980; Lave & Wenger, 1991; Vygotsky, 1978; Dunlap et al. 2000). The survey results from the initial training were used to course correct the intervention and design two subsequent trainings. Survey and post-interview results suggest that this was a good decision, as participants both scored higher on their understanding after the follow up trainings and rated their experience of the intervention more highly.

The above process data suggests the finding that it would have been useful to have more time to practice with the material, or, alternatively, to include less material in the scope of the intervention. Survey and observation results indicate that participants had a strong preference for the training material on Interventions, and found the FBA material to be interesting but both complicated and less immediately useful. Given the level of experience of the participants, their level of education, the scope of their roles, and the complex environment in which they were functioning, it makes sense that participants would value hands-on tools over the more theoretical background to the decision making process.

Implications and Conclusion

Overall

The results of the action research described herein suggest several ways of improving staff use of behavioral intervention. First and foremost, in order for staff use of behavioral intervention to be effective, clear and consistent discipline procedures must be in place to guide practice and give purpose to the gathering of data regarding the impacts of behavioral intervention. Secondly, professional development that involves coaching of support staff should consider the capacities of those involved in order to ensure that coaching is provided in a manner and at a time when it will be beneficial to practice. Third, the findings also point to the useful implication for school leaders: that their paraprofessional level staff may have additional capacity; and that it may be possible to build in short term peer-to-peer coaching or collaboration cycles to grow their skills using existing resources.

Discipline Procedures: One implication of this study is that without a clear and consistent set of policies to guide the use of behavioral intervention, it is difficult for behavioral

intervention to have a lasting impact on student discipline. Without a clear policy, school staff will not be able to enforce consistent expectations for students. Lack of consistent expectations leads to inaccuracies in any data generated to measure the impact of behavioral intervention, and makes it difficult to use data to guide decision making about student supports.

Professional Development of Support Staff: The ability of support staff to participate in and benefit from professional development activities, such as in-service training and/or coaching cycles, hinges on their professional capacities. Any professional development for support personnel should consider the previous experiences, education, and level of professional commitment of the parties involved. This information should be used to tailor the focus and depth of the professional development in order to match participants' strengths and abilities. If the support staff do not have existing systems of support or training built into their role, it may be more appropriate to build in a baseline form of supervision and communication prior to initiating an in depth professional development plan. Professional development in this context may also benefit from a focus on providing concrete and actionable tools or practices, from which a shared understanding of best practice can be established enabling deeper engagement in the material.

Supporting Skill Transfer: The findings of this study indicate that participants improved their understanding and use of the training material as a result of having a professional forum in which to talk about their experiences with colleagues. While it is often the case that in-person administrative or supervisory support for the development of staff at this level may not be available, it may be beneficial to build in collaboration time into the meeting schedule or some form of peer-to-peer coaching for these personnel, and to provide an agenda to encourage ongoing discussion of the material.

Possible Limitations

A major factor in the professional development of the Participants targeted in this study was the school culture during the time when the study was taking place. The lack of a shared vision for school discipline that included clear policies, training for staff implementation, and data collection regarding impact all led to low morale, frequent disagreement and conflict between personnel, and a number of staff departures mid-year. Over the course of the year and during this study, the above issues were a dominant concern amongst the behavior team, which made it difficult for participants to participate to their fullest extent.

Additionally, the highly flexible nature of the BT roles and responsibilities made it difficult to set up consistent observation and data collection practices, which led to a disproportionate amount of the data collection being qualitative in nature. While there is definite value in the qualitative data, fidelity to the Functional Behavior Assessment methodology does require a more quantitative approach.

Ideas for Future Research

Based on the findings of this study, it is recommended that future research into the topic of building the ability of support staff to provide evidence based behavioral interventions should focus on identifying the highest leverage practices to elicit desired changes in behavior. The data collected in this study indicated a strong preference on the part of the participants for concrete tools.

Additionally, further research into the utility of modeling effective behavioral intervention as a professional development strategy to increase skill transfer to trainees may be warranted. Participants reported that their biggest learning during this study stemmed from

simply being able to hear and observe how the researcher conceptualized the work about behavioral intervention, and that further modeling of effective practices may have continued to yield results. The approach to onboarding new staff to an existing behavioral system could be explored to look at the effect of shadowing or mentor training with a more experienced staff.

Conclusion

The problem of practice this action research set out to address was that the Behavior Team at ABC Academy was not able to effectively or consistently manage student behavior problems at the school. This action research project tested the hypothesis that BT Participants would improve their ability to effectively manage student problem behaviors if they received training and coaching support. The analysis of impact data found that Participants did increase their knowledge of the FBA framework, and they did significantly increase their ability to use a variety of intervention strategies to manage student behavior. The connection between the two components was understood by the participants, however the evidence indicates that participants did not use the FBA framework as intended. This was due to Participants' clear preference for hands on, concrete tools, and the FBA framework being more theoretical than practical. Finally, the impact data revealed that participants' sense of confidence in their ability to provide behavioral intervention did increase after participating in the study, as a result of learning new terminology to describe their practice, of learning when and why to use a variety of intervention strategies, and from participating in coaching. The process data revealed that, while the education level and professional capacities of the participants was at times an obstacle, the participants did find the intervention to be helpful. Participants found significant value in the observation tool and the coaching process, while on the other hand scope of the action research and the in-service trainings covered too much material too quickly. These results have

implications for how school leaders can train and support their school teams to improve the quality of behavioral intervention at their sites.

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Appendix A:

BT Staff Observation Rubric***Functional Behavior Assessment and Behavior Intervention***

Component	Level of Performance			
Functional Behavior Assessment	Emerging	Basic	Proficient	Distinguished
1a. Knowledge of FBA rationale, processes and terminology	BT Staff does not demonstrate an understanding of the FBA process, and is not able to define or use terminology appropriately.	BT Staff demonstrates a basic understanding of the FBA process by defining and/or using some terminology appropriately when describing student behavior problems and staff interventions	BT Staff clearly understands and is able to use appropriate terminology from FBA framework (Antecedent, Replacement Behavior, etc.) when describing student problem behavior and staff interventions.	BT Staff consistently uses FBA terminology to describe behavior and interventions. As a result, other staff are encouraged to practice and use this language.
1b. Application of FBA rationale when designing/selecting interventions	The BT Staff <i>does not use</i> the FBA process to design or select interventions.	The BT Staff <i>needs guidance</i> to use the FBA process to select appropriate interventions	The BT Staff is able to <i>independently use</i> the FBA process to select appropriate interventions for youth who demonstrate problem behavior	The BT Staff <i>frequently uses</i> the FBA rationale when designing/selecting behavior interventions, and is able to
Intervention Strategies	Emerging	Basic	Proficient	Distinguished
2a. Knowledge of Intervention Strategies	BT Staff is not able to describe a variety of intervention strategies or their uses	BT Staff is able to describe some intervention strategies as well as their use	BT Staff is able to describe the range of intervention strategies and their uses	BT Staff consistently uses descriptions of interventions and their uses when talking about student needs, and encourages others to do so as well
2b. Use/Implementation of Intervention strategies	BT Staff does not intentionally use intervention strategies	BT Staff occasionally uses some intervention strategies but sometimes not	BT Staff is comfortable using some interventions strategies, and can select	BT Staff consistently uses the range of intervention strategies for their designed purpose, and is able to explain

		intentionally or at the right times	appropriate strategies for various situations	their reasoning to others
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Appendix B:

Staff Observation Scatterplot

Staff/Date/Time: _____

Target of observation: Staff's use of behavior intervention strategies

Time	Context	Antecedent	Behavior	Intervention	Outcome
Discuss	Proposed Function of behaviors?			Did interventions match function?	

Notes: _____

Appendix C:

Pre-Interview Questions

1. How were you trained to help with student problem behaviors? What would have made this process better?
2. What strategies do you use to help with student problem behaviors? Why?
3. How do you decide what intervention to use in the moment?
4. Do you feel your approach is effective? What would make it more effective?
5. What might help you become more effective at working with student behavior?

Post-Interview Questions

1. What strategies do you use to help with student problem behaviors? Why?
2. How do you decide what intervention to use in the moment?
3. Do you feel your approach is effective? What would make it more effective?

Appendix D:

Staff Log: Post-Observation

Were my interventions effective at reducing student problem behavior?

- 1 - Not at all
- 2 - At least once
- 3 - Some of the time
- 4 - Most of the time
- 5 - Every time

What Interventions did I use:

Did I think about a variety of Interventions before choosing one?

- 1 - Not at all
- 2 - At least once
- 3 - Some of the time
- 4 - Most of the time
- 5 - Every time

Did I think about the ABCs when selecting interventions?

- 1 - Not at all
- 2 - At least once
- 3 - Some of the time
- 4 - Most of the time
- 5 - Every time

How did I use the ABCs when selecting Interventions?

Was it helpful to think about the ABCs when selecting interventions?

- 1 - Not at all
- 2 - Slightly
- 3 - Some of the time
- 4 - Most of the time
- 5 - Every time

Appendix E:

Research Journal:

The purpose of the research journal is to record my thoughts and observations after different components of the intervention cycle. After each staff observation, I will note how helpful or unhelpful the observation tool appeared to be, as well as any other interesting patterns that may emerge. After each coaching session, specific attention will be paid to the benefits and limits of the coaching protocol/format in addition to the actual content of the coaching session.

The following are guiding questions and prompts to facilitate the reflection on the impact and process data I plan to collect:

Post-Observation:

How effectively did the staff use the FBA framework to select interventions?

How effectively did the staff use the variety of interventions they could select from?

How clearly were they able to articulate their understanding?

How helpful was the Observation Tool in collecting data about staff use of the FBA framework?

How helpful was the Observation Tool in collecting data about staff use of Interventions?

What would make the tool more useful?

Post-Coaching

Did the conference meet the intended goals? In what ways? How effectively?

What are the next steps?

Other notes regarding staff attitudes or level of engagement in the process:

Appendix F:

Example of the Coding used to quantify and analyze the data collected from the Observation Tool

		Question 1: Do staff understand and use the ABCs when selecting interventions	Question 2: Do staff understand and use a variety of Intervention Strategies
ARP Codes		Definition	Example
Antecedent-General Reference	A-G		
Antecedent-Academic Expectation	A-A	Academic expectations trigger a behavioral response	Complete assignment
Antecedent-Behavior Expectation in Class	A-BC	Behavioral expectations in classroom trigger behavior	Sit down Where is your hall pass
Antecedent-Behavior Expectations in Hall	A-BH	hallway expectations trigger a behavior	Where is your hall pass
Antecedent-Peer Interaction	A-P	Peer interactions trigger a behavior	Jokes Insults
Behavior-General Reference	B-G		
Behavior-External	B-E	Behavior that presents in externally, towards the environment or context	Disruption Defiance
Behavior-Internal	B-I	Behavior that is directed internally, away from the environment or context	Withdrawal Ignoring Work refusal
Behavior-Severity	B-S1,2,3,4,5	Baseline, Early escalation, Escalation, Crisis, Post-crisis	
Consequence-General Reference	C-G		
Consequence-Access	C-A	Behavior designed to access attention, preferred object/activity, or stimulus	
Consequence-Escape	C-A	Behavior designed to escape attention, preferred object/activity, or stimulus	
Intervention-General Intervention	I-G		
Intervention-Replacement Behavior	I-R	Counseling interventions are designed to engage the youth in expressing and exploring their thoughts and feelings	Processing Validation Persuasion Goals reminder
Intervention-Counseling	I-C	Motivational interventions are designed to encourage and reward desired behavior	Verbal Praise Positive reinforcement Contracting Fun

Intervention-Motivation	I-M	Interruption interventions are intended to interrupt a problem behavior in order to prevent it from continuing	Verbal/non-verbal prompt Distraction Proximity Removal
Intervention-Interruption	I-I	Active interventions are used to get a youth moving and provide an alternative to the problem behavior	Do-Over Role Modeling Kinesthetic
Intervention-Active	I-A	Group interventions are necessary when problem behavior is being displayed by multiple youths, or when it is more appropriate to not single out an individual	Group removal Conflict resolution Classroom reset
Intervention-Group	I-G	Guided Self interventions can be taught to a youth in advance so that they can manage their own behaviors better	Self-removal Coping Skill/Self-soothing
Intervention-Guided-Self	I-S	Crisis interventions are to be used during dangerous situations to improve the chances of a safe outcome	Crisis Communication
Intervention-Crisis	I-Cr		
Intervention-Assigning consequences	I-Co	No intervention	
Intervention-None	I-N		
Outcome-Increase	O-I	After intervention, problem behavior decreases	
Outcome-Decrease	O-D	After intervention, problem behavior increases	
Outcome-None	O-N	No response to intervention	