



## AN ABSTRACT OF THE THESIS OF

Bailey E. Wilcox for the degree of Master of Arts in Interdisciplinary Studies in Psychology, Psychology, and Speech Communications presented on May 16, 2013.  
Title: Barriers to Implementation of Comprehensive Behavior Support Planning in Schools

Abstract approved:

---

Teri Lewis

Student problem behavior continues to be a primary concern in schools and, as resources decrease and greater burden is placed upon teachers, schools are pursuing better ways to manage student behavior. Researchers have continually found that when correctly implemented, Positive Behavior Supports (PBS) is an effective system for mitigating problem behavior. However, individualized student supports within PBS are often poorly designed and implemented, and practitioners lack tools to assess the efficacy of these particular interventions. The present research evaluates the usefulness of an interview process for evaluating barriers to correctly implementing individualized supports. Researchers have coded previously conducted semi-structured interviews with school administrators, behavior specialists, and teachers about barriers they have experienced when implementing individualized supports. Researchers have analyzed the data through a theme analysis and through Gilbert's (1978) Performance Engineering framework to elucidate systems-wide challenges and areas for improvement. The present research

provides evidence of specific barriers, such as lack of resources and knowledge, which impede the development, implementation, and maintenance of individualized supports within PBS, and offer insight into the type of interview protocol needed to effectively evaluate the efficacy of such supports. Further research that incorporates aspects of Gilbert's (1978) framework into the interview process may more effectively identify barriers to behavior support planning and may be beneficial for schools.

Keywords: *Positive Behavior Supports, FBA, education*

©Copyright Bailey E. Wilcox  
May 16, 2013  
All Rights Reserved

Barriers to Implementation of Comprehensive Behavior Support Planning in Schools

by  
Bailey E. Wilcox

A THESIS

submitted to

Oregon State University

in partial fulfillment of  
the requirements for the  
degree of

Master of Arts in Interdisciplinary Studies

Presented May 16, 2013  
Commencement June 2013

Master of Arts in Interdisciplinary Studies thesis of Bailey E. Wilcox presented on May 16, 2013.

APPROVED:

---

Major Professor, representing Psychology

---

Director of Interdisciplinary Studies Program

---

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

---

Bailey E. Wilcox, Author

## ACKNOWLEDGEMENTS

The author expresses sincere appreciation to the following individuals:

Teri Lewis, PhD. for sharing her love of behavior analysis, for offering guidance, and for fostering my personal and professional growth.

Frank Bernieri, PhD., Erin Gallagher, PhD., and Marilyn Read, PhD. for their guidance as committee members.

Angus Kittelman, Angelica Falkenstein, Walter Piper, Victoria Braun, Birken Noesen, Pamela Lundeberg, and Nathan Herdener for their friendship and for enduring this process with me.

Oregon State University School of Psychological Science for its funding.

Mom, Dad, Evan, and Gram for their words of encouragement.

Jordan Clark, for his love, support, patience, and encouragement, which has sustained me throughout this process.

## TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	1
Applied Behavior Analysis.....	2
Literature Review .....	5
Functional Behavior Assessment.....	7
Organizational Effect of PBS .....	11
Fidelity of Implementation .....	15
Analyzing Schools as Businesses .....	17
Performance Engineering .....	21
Evaluation of Behavior Support Challenges.....	24
Method.....	29
Participants .....	29
Materials .....	30
Procedure .....	31
Results.....	34
District-Wide Themes.....	34
Expectations.....	34
The Teaming Process.....	34
Successes in the FBA Process .....	37
Barriers in the FBA Process .....	38
Potential Solutions .....	39
Themes by Staff Position.....	40

## TABLE OF CONTENTS (Continued)

	<u>Page</u>
Teachers .....	40
Behavior Specialists.....	41
Administrators .....	42
Themes by Education Level .....	42
Elementary .....	43
Middle School.....	44
Performance Engineering Framework .....	46
Data .....	46
Knowledge .....	48
Resources .....	48
Capacity .....	49
Incentives .....	50
Motives .....	51
Efficacy of the Data Collection Process .....	51
Discussion.....	53
Barriers and Solutions.....	53
Limitations .....	56
Implications .....	58
Conclusion .....	60
Bibliography .....	61
Appendices .....	65
Appendix A.....	66
Appendix B .....	70
Appendix C .....	71

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1. Tally of individuals cited as being involved in the FBA/BIP process.....	35
2. Staff members' self-indicated role in the FBA process.....	36

## CHAPTER 1— Introduction

Schools continue to face significant challenges in dealing with disruptive and violent student behavior. Not only do schools need to mitigate these behavioral problems, they often must do so with a decreased budget and staff layoffs (OESP, 2000; Adelman & Taylor, 2011; McIntosh, Horner & Sugai, 2008). Walker, Colvan, and Ramsey (1995) explain that there are a variety of student behavior that schools must manage and they state that there are high correlations between these behaviors and future problems including violence, poverty, and trouble with the law. Lewis, Jones, Horner, and Sugai (2010) note that of students with the label of emotional behavior disorder (EBD), 50% drop out of school and 70% are arrested. Sugai, Horner, and McIntosh (2008) report that student conduct and discipline are frequently found to be the greatest concerns of school staff and the public. The value in developing effective interventions for these individuals is undeniable. Identifying key elements to an individual's success and fostering a positive environment can change one's life course (Walker, Colvan & Ramsey, 1995). However, while there are ways to enable student success and to ameliorate behavioral problems, schools face significant budget deficits and, consequently, often lack the resources to effectively implement many of these behavioral solutions.

Because of school budget cuts, teachers face large classrooms of underprepared students and administrators lack the funds to hire additional staff (e.g., McIntosh, Horner & Sugai, 2008). Teachers are now required to work with so many children that 36 states have enacted laws that restrict class size (Keyworth, 2012).

Furthermore, the National Association of Education Reform found that in 2011, only 34% of students in the 4<sup>th</sup> grade read at a proficient level. This number maintained in 8<sup>th</sup> grade and slightly increased to 38% in 12<sup>th</sup> grade. Proficiency in math decreased from 40% of 4<sup>th</sup> grade students meeting proficiency levels to 26% of 12<sup>th</sup> graders (National Association of Education Reform via Keyworth, 2012). Teachers not only have large class sizes, but most of their students struggle to perform at grade level. Consequently, teachers have little time to devote to individual students and schools have little money to hire additional staff to assist in managing behavioral problems. Given these difficulties, schools are looking to systems of support to help students who are at risk, while avoiding the depletion of scarce resources that such a system could cost (Adelman & Taylor, 2011).

### **Applied Behavior Analysis**

Baer, Wolf, and Risley first describe applied behavior analysis (ABA) in a 1968 seminal article in which they define the science as applied, behavioral, and analytic. “Applied,” indicates that the problems of interest are those with social meaning that will impact the quality of life of the organism producing them. “Behavioral” specifies that one studies only observable and measurable behavior. Finally, “analytic” implies that the behavior is well enough understood that a researcher can control it (Baer, Wolf, & Risley, 1968).

Another central component of ABA is the concept that behavior can be broken down into an antecedent, behavior, and consequence. Cooper, Heron, and Heward (2007) explain that the antecedent of a behavior is what comes before the

behavior occurs. The antecedent explains why the behavior happens at a particular moment and is the stimulus that precipitates the behavior. For example, if a child throws a chair when his teacher has required him to sit still and complete his math worksheet, the antecedent may be the teacher's demand. The antecedent, however, could also be math, sitting still, or even sitting by a particular peer. The antecedent is entirely dependent upon the individual, since it is whatever causes the individual to engage in the behavior. The antecedent may not be easy to identify since what drives the behavior of one individual may be obscured by a variety of environmental stimuli, or even by what the researcher feels is a rational cause for the behavior.

The second component in this sequence is the behavior. In this example, the behavior may be the child lifting his chair above his head and throwing it. Since the behavior is the reason for the analysis, it is often easy to identify. However, it is important to note the frequency, duration, and location of the behavior among other qualities. A single scream by a child once a week may be tolerable, but if the scream is 90 decibels, then this is necessary to consider. Similarly, it would be acceptable for a student to prepare for classwork before each assignment. However, if the student spends half of the class period sharpening pencils, grabbing a chair and getting ready to work, then the duration of the behavior has made it concerning.

Finally, it is integral to identify the consequence. This is what happens after the antecedent and behavior have occurred. In the chair-throwing situation, the consequence may be the teacher telling the child to leave the room and go to the principal's office. The consequence is said to maintain the behavior if the behavior

continues and is termed the “maintaining consequence.” Whenever a behavior is repeated, there is a maintaining consequence. If behavior is not repeated, the consequence is said to be punishing (Cooper, Heron & Heward, 2007). A consequence that may seem to be punishing to a researcher or practitioner, such as being sent to the principal’s office, may be reinforcing to the individual if he likes the principal or is happy to escape math work. It is integral to remember that antecedents, consequences, punishers, and reinforcers are different for each individual and are defined based on their affect on the individual’s behavior.

This approach, in which one defines each component of a situation and identifies its effect, is central to the field of ABA and allows researchers and practitioners to make data-based decisions for how to best intervene with undesirable behavior. It is vital to realize that, in this approach, one must analyze all aspects of a behavior and consider the impact of environmental stimuli on the individual, rather than simply considering how one may personally be influenced by the stimuli. Positive Behavior Support (PBS) is founded on these components and is predicated on the belief that treatment decisions must be guided by data and must be evaluated for their contextual fit and relevance to the individual. In short, PBS is a system-based approach for applying ABA to an entire school (Carr et al., 2002).

## CHAPTER 2 — Literature Review

Schools need an evidence-based, systems-wide approach that is both effective and efficient. Research has consistently found that PBS is effective in creating a positive school environment, removing problem behavior, and fostering student success (e.g., McIntosh, Horner & Sugai, 2008). Furthermore, such a system can be implemented with little cost to schools (Blonigen, Harbaugh, Singell, Horner, Irvin & Smolkowski, 2008).

There are an abundance of studies that support the efficacy of PBS, which may largely be due to its behavior analytic roots (OSEP Center on Positive Behavioral Interventions and Supports, 2000; Bradshaw, Koth, Bevens, Ialongo, Leaf, 2008; Sugai & Horner, 2009; Carr et al., 2002). As schools face increasing challenges with managing student behavior, PBS has evolved as an evidence-based approach that is founded on data-based decision-making and a person-centered strategy (Carr et al., 2002; Carr, Dunlap, Horner, Koegel, Turnbull, Sailor...Fox, 2002). A person-centered strategy is one that considers the effect of behavior and stimuli on the particular individual being evaluated. This allows for the analysis and intervention to possess a high contextual fit and enables both a more accurate analysis of behavior and an intervention that integrates environmental constraints (ex. teacher time, number of staff, etc.) (Bambara, Nonnemacher, & Kern, 2002).

While there are a myriad of fads within special education, advocates of PBS emphasize that there are more than 20 years of studies examining its efficacy and that it is based on the principles of ABA (Carr et al., 2002). Sugai, Horner, and

McIntosh (2008) argue that PBS is effective because of five basic emphases: prevention, a foundation in ABA, evidence-based interventions, an increase in building capacity, and an instructional approach to modifying behavior. School-wide PBS implementation emphasizes the importance of clarifying school rules and designing guidelines to support all students. This helps schools prevent disruptive behavior that may arise from a lack of structure or knowledge of how to behave appropriately (Sugai & Horner, 2009). The principles of ABA serve as the foundation for PBS, and PBS practitioners emphasize that they only rely upon interventions that have been studied and have been found to be effective. When all levels of school-wide PBS are effectively implemented, the number of behavior problems is reduced and the school's academic performance increases (Sugai & Horner, 2009). This reduction in problem behavior allows schools to increase their capacity since they gain resources that they can direct towards more students. Because schools need to adapt to increasing class sizes and a reduction in staff, it is necessary that they implement strategies that allow them to adapt to these changes and to successfully increase their capacity (OSEP Center on Positive Behavioral Interventions and Supports, 2000; Sugai & Horner, 2009). Lastly, PBS is effective because it focuses on managing the problem and teaching the individual how to get their needs met in a more socially acceptable manner, rather than leading to the development of interventions that only punish behavior (Sugai & Horner, 2009). These components enable students to benefit from PBS while maximizing resources and contributing to the overall efficacy of schools.

## **Functional Behavior Assessment**

To fit the needs of children with varying levels of problematic behavior, PBS groups individuals into levels of support. PBS follows a three-tiered public health model that divides individuals into three groups: Tier I, Tier II, and Tier III, where each tier represents different levels of care that are needed to serve particular individuals. OSEP Center on Positive Behavioral Interventions and Supports (2000) explain how this model applies to PBS. Tier I accounts for about 80% of the population and represents those who are successful with only the general supports that are in place for everyone. Tier II accounts for 10-15% of the population and represents individuals who need extra support to be successful, but who are able to receive support in a group setting. Examples of Tier II support include social skills groups, peer mentors, and lunch buddies. Tier III accounts for the top 1-5% of the population and represents individuals that need intensive, individualized support (OSEP, 2000). Tier III is what most of administrators and special education teachers focus on (Ingram, Lewis-Palmer, Sugai, 2005). Typically, when an individual is described as being in Tier III, a practitioner conducts a functional behavior assessment (FBA).

A FBA provides guidelines to identify the triggering antecedents of an individual's behavior, operationally define the behavior, and identify the maintaining consequence (e.g., Broussard & Northup, 1995; Dunlap et al., 1991; Horner, 1994; Ingram et al., 2005). Once a FBA is conducted, a behavior intervention plan (BIP) is developed based on the information obtained in the FBA. The BIP is based on the

data obtained in the FBA and is a script for how school staff will elicit a change in the student's behavior (e.g., Horner, Sugai, Todd, Lewis-Palmer, 1999). However, it is necessary that staff possess training to complete effective FBAs because the quality of an FBA is indicative of its success. Also important, is the way in which the FBA is implemented. The strength of an individual plan is irrelevant if it will not be implemented with accuracy and high fidelity (Zins & Ponti, 1990).

PBS is widely known for its ability to manage Tier III support, specifically through the creation of FBAs and BIPs. FBAs identify triggering antecedents that lead to problem behavior, as well as setting events that modify the magnitude of maintaining consequences. Furthermore, they guide researchers to operationally define problem behaviors and evaluate the maintaining consequences of these behaviors. A good FBA will identify the events that precipitate and maintain a behavior and determine a more socially appropriate replacement behavior (OSEP, 2000). The purpose of this is to neutralize setting events, remove triggering antecedents, and to identify alternate, more appropriate behaviors that the student can engage in to receive the same consequences that their inappropriate behavior gained them (Cooper, Heron & Heward, 2007; Martin & Pear, 2007). It is necessary that the replacement behavior allows the student to achieve the desired consequences faster than the problem behavior or the student will not have incentive to employ the alternate behavior. The practitioner takes the identified alternate behavior and develops the BIP so that an individual's environment is set up to support the alternate behavior (e.g., Sugai, Lewis-Palmer & Hagan-Burke, 1999). Once the

student engages in the desired alternate behavior, practitioners can employ the BIP to modify the behavior and bring it closer to the end goal (OSEP, 2000).

However, FBAs can be poorly developed and even excellent BIPs can be implemented with poor fidelity or not implemented at all. Ingram, Lewis-Palmer, and Sugai (2005) have conducted a study in which they have evaluated the efficacy of function-based planning (such as FBA planning) with non-function based planning. The researchers have found that function-based planning results in greater decreases in problem behavior than non function-based assessments do. Blood and Neel (2007) have explored behavior assessments included in student's IEPs at a local school district. They have found that few students have completed FBAs and that most student files only have a list of consequences that could follow a behavior. These assessments lack the individualization that FBAs require and will likely fail to offer the student support and to build district capacity. Good assessments should include a hypothesis statement postulating why the student is engaging in the undesirable behavior, which requires a synthesis of the antecedents and behaviors (Sugai, Lewis-Palmer & Hagan-Burke, 1999). Similarly, VanAcker, Boreson, Gable, and Potterton (2005) have found that many of the FBAs they have examined do not include the function of the behavior. This is a central component in discerning appropriate alternative behaviors and in ascertaining how to develop an environment to support the individual. While it is necessary that school staff have the knowledge to develop effective FBAs, it is as important that staff skillfully implement them. When FBAs are effectively implemented, it is largely because

those who create them consider the nuances of a situation and develop an individualized behavior assessment (Ingram, Lewis-Palmer & Sugai, 2005).

### CHAPTER 3 — Organizational Effect of PBS

An additional benefit of PBS is its effect on a school's organization. Successful implementation of PBS requires effective communication among staff members and a clear delineation of each individual's responsibilities (Bradshaw, Koth, Bevans, Ialongo & Leaf, 2008). Detrich (2012) emphasizes that consultants and practitioners will not implement PBS in a school unless there is buy-in from at least 80% of the staff. Furthermore, schools must make a commitment to develop their organization and focus on problem behavior for at least 3 years. This type of commitment to a system is significant, and the requirement of such staff motivation may contribute to PBS' efficacy in changing school culture and organizational health. Moreover, staff members at each school develop PBS systems-based solutions and adaptations within the context of their unique school culture (Detrich, 2012).

An exploration of Brehm's (1966) theory of reactance highlights the benefits of allowing school staff the power to drive organizational change in their schools. Brehm (1966) explains that individuals have a variety of possible behaviors that they are free to engage in, and that individuals desire to maximize their amount of freedom to act. When one tells someone to engage in a particular behavior, such as when a school district or state education department tells a teacher how to change his classroom, the state agency takes freedom of the teacher. Brehm (1966) explains that when individuals perceive a threat to their freedom to act, they respond by reacting and attempting to defend any further loss of power. Additionally, behaviors

that one initially may have intended to engage in (ex. restructuring a school day) may become less reinforcing when one is told to engage in that behavior. If a school staff member is excited about functioning as an agent of change and is then told by district or state agencies that he must enact the changes he already planned to make, he may be less intrinsically motivated to implement the changes than if he had made them on his own accord. If a staff member is given no opportunity to assist in driving a change and is instead told what to do by an educational agency, he may react by attempting to thwart the change to maintain his freedom to act. Reactance theory provides one explanation for why it is highly beneficial to allow individuals to become agents of change within their own organizations and why this practice has been a key success within the PBS model of organizational change.

Grimes and Tilly (1996) also discuss how ownership for system-wide change is effective in increasing participation and commitment. Grimes and Tilly (1996) emphasize that effective systemic change involves four components: professional practices, conceptual framework, leadership messages, and staff development. First, they suggest that changes in professional practices should emerge before changes in policy are mandated. Similar to Brehm's (1966) theory, Grimes and Tilly (1996) argue that since individuals are likely to take greater ownership for something that they assist in developing, it can be far more effective to drive changes in professional practices before changes in policy.

Grimes & Tilly (1996) suggest that district or state-wide change should first be tested within a school and should be the product of staff-driven initiatives. They

argue that effective systems within a school should then be generalized to the district, region, state, and lastly, to the federal level. Grimes and Tilly (1996) suggest that the current direction of change, top-down, is ineffective because it lacks testing, leads to changes that may not have a high contextual fit at all levels, and is often implemented with a lack of ownership. Grimes and Tilly (1996) argue that in order for systemic change to be successful, there must be some level of ownership among staff and that buy-in is critical. This often is not the case when a system of change is a federal requirement. One of the benefits of PBS is that school staff possesses the opportunity to tailor practices to their culture and needs, and to take responsibility for its successes and failures.

In explaining the need to work bottom-up, Grimes and Tilly (1996) describe five key aspects. The first is that systemic change begins with school-based leaders. The second is that those who are organizing change also are active in implementing it. Grimes and Tilly (1996) suggest that when one bears responsibility for the success or failure of their idea, they have greater motivation to make it successful. The third aspect is that schools compare change against where they were, rather than against where other schools are. It is important that leaders focus on their particular school and that their progress is clear and is celebrated. The fourth aspect is communication; although effective communication is required within all of these aspects, Grimes and Tilly (1996) emphasize that effective leadership and effective change requires frequent and clear communication on all ends. Finally, Grimes and Tilly (1996) suggest that changes should not be sold to staff, but rather should be

promoted such that staff member are motivated to affect them. Performance feedback is the final key component to effective systemic change. All five of Grimes and Tilly's (1996) key aspects are essential to driving long-term, effective, systemic change in a school.

When ameliorating professional practices, Grimes and Tilly (1996) argue that it is valuable to focus on principle changes rather than procedural ones. Principle changes allow individuals to agree on ways in which they would like to improve but to have ownership over how they ascertain improvement. In contrast, procedural changes dictate how an individual must behave and may lead to staff resistance. After organizational leaders decide to change their principles, it is important that leadership issue statements that enforce the changes and drive progress forward. Weak leadership during a time of change can lead to inconsistency and can forestall improvements. Finally, Grimes and Tilly (1996) explain that staff development during a time of change does not constitute sending staff to a single workshop. Staff development should be viewed as an ongoing and fluid process in which new skills are taught, practiced, and refined. In sum, Grimes and Tilly (1996) emphasize that bottom up change, in which school staff take responsibility for developing systemic change and in which policy changes reflect those of culture and practice, is best. PBS is effective because it reduces inappropriate behavior while it simultaneously considers the individual culture of schools, requires ownership, and involves widespread restructuring.

### **Fidelity of Implementation**

While it is important to have an effective, evidence-based practice, implementation of such a practice is critical (Detrich & Lewis, in press). The systems based approach that PBS utilizes is not only practical for targeting different levels of intervention, but it is beneficial in aiding the overall organizational health of a school. In a three-year longitudinal study, Bradshaw, Koth, Bevans, Ialongo, & Leaf (2008) surveyed 37 elementary schools to determine the impact of PBS on the organization. The researchers uncovered statistically significant effects for PBS intervention on staff commitment to student success, emphasis on academics, availability of resources, and supportiveness of staff ( $p < .05$ ). One implication of these findings is that PBS allows schools to better manage their resources. This benefit is well understood and has resulted in many more schools adopting PBS.

Keyworth (2012) discusses educational interventions that are similar to PBS in their structural nature, but that are ineffective. Some of these ineffective interventions include increased funding, class size reduction, charters schools, comprehensive school reform, no child left behind (NCLB) and school improvement grants. As part of NCLB legislature, if a school fails to make adequate progress for five consecutive years, they must chose to reopen as a charter school, replace most or all of their staff, have an outside organization operate their school, turn the school over to the state education agency, or engage in another approved type of restructuring (U.S. Department of Education, 2001). Rhim & Redding (2011) explore these options when offered to schools through student improvement grants

and they explore the ways in which schools chose to change. Additionally, they suggest methods that may lead to greater success in turning around schools. The Center on Innovation and Improvement (2008) explains these options and offers suggestions for how to complete them. While making these types of substantive changes may appear to be effective (and sometimes they are), they lack clear definitions and do not require the same type of ownership that organizational changes do. Themes of successful turnarounds include having frequent and honest communication between school leaders and staff and working to gain support of the community. Sustainable turnarounds require organizational change, which is an integral component of implementing PBS.

Many interventions differ from PBS in that they lack the level of ownership needed within PBS and they do not create major systemic changes. Increasing resources, a theme seen in many of the above interventions, may be beneficial but does not necessarily lead to systemic change. Allowing a school to continue current practices and increasing resources positions a school for failure when those resources end. Integrating more effective and efficient ways of managing problems may lead to more sustainable success (Keyworth, 2012). McIntosh, Horner, and Sugai (2008) describe sustainability of PBS through a three-term contingency. They describe changing initiatives and ongoing challenges as antecedents, fidelity of implementation as impacted by loss of key personnel and funding as the behavior, and student outcomes as the consequence. Creating long-term systemic changes through PBS has the potential to greatly impact student success, and sustainability

should be the goal when developing PBS or any school-wide intervention (McIntosh, Horner & Sugai, 2008).

Redding (2012) describes five elements that are integral for effective implementation of systemic changes: “planning the initiative,” “defining practice and process,” “managing the implementation,” “monitoring the progress,” and “adjusting the course.” Within the context of PBS, these elements all describe processes that are staff driven. PBS requires that school personnel plan how they will maintain their particular culture while implementing a new system. It is imperative that PBS is flexible in its ability to be applied to a multitude of schools and that schools are willing to make modifications to their current systems. It is integral that, similar to FBA planning, data-based decision-making guides the process of implementation, and the implementation is constantly examined and adjusted. Redmon (2012) emphasizes that the strategies and processes utilized in adopting systemic change serve as antecedents for the behavior of the system (in this case a school) and are the underpinnings of reinforcing or punishing consequences.

### **Analyzing Schools as Businesses**

One way of viewing the implementation of systems approaches such as PBS is through a business model. Senge (2010) reiterates the importance of developing systemic changes and suggests that it is far more effective to enact small, calculated changes upstream in an organization, rather than to make many larger changes downstream. Senge (2010) also argues that while it is important for members of an organization to be effective individually and as a group, the most effective members

are those who can identify the systemic underpinnings of a problem, rather than identify individuals at fault. While Senge offers five key principles to effective organizational management, he emphasizes the fifth principle, systems thinking, and suggests that adopting this perspective is fundamental to creating and maintaining positive changes. Although these concepts are intended for fostering the development of effective business management strategies, Senge et al. (2012) explore the application of these concepts to schools. Senge et al. argue that similarly to how systems thinking is essential for improving businesses, it is also essential for improving schools.

Redmon (2012) also explains the importance of systems thinking, and suggests that struggling schools must adopt more effective systems of governance similarly to struggling businesses. Redmon suggests that the most successful companies focus on short and long-term results of their practices, operationalize their guiding principles, encourage innovation and trial and error practices, and do not allow themselves to be restrained by poor performers. Further, Redmon (2012) argues that to achieve positive results, schools should adopt Continuous Learning Group's (2013) four principles to organizational effectiveness, which they term DCOM: direction, competence, opportunity and motivation. Organizations must have clear values and objectives in order to move forward in a cohesive manner. Additionally, they must have competent employees whose knowledge and values have a high fit with those of the organization. Employees must have resources and flexibility to fulfill their jobs, to be innovative, and to drive the organization forward.

Lastly, there must be incentives for exceptional performance and consequences for poor performance. Redmon lists these four components as necessary for achieving systemic change and, more importantly, for achieving desired consequences.

Without one of these four components, an organization may struggle to achieve their end goal (Redmon, 2012). Although schools and businesses are different, the organizational practices that allow some companies to be more successful could similarly allow some schools to be more successful. Effective organizations utilize the same basic principles.

One key component of a successful business is an effective chief executive officer (CEO). In the same way that a CEO affects a corporation, a principal affects a school. Redmon argues that highly effective CEOs observe staff performance and give consequences accordingly, encourage discussion around performance and actively shape it, and clearly delineate expectations. Less effective leaders have limited interaction with staff, lack clear feedback on performance, and do not deliver positive or negative consequences. Like CEOs, principals are integral to the health and success of an organization (States, 2012). In fact, States (2012) lists principals as having the second greatest impact on student success. In measuring this impact, States has found that teacher development has an effect size of 0.84. The third largest effects are seen in goals and expectations, and teaching and curriculum. Furthermore, States (2012) has found that effective principals are more likely to keep effective teachers at a school while ineffective principals are the main reason for teachers leaving a school. Redmon (2012) states that effective business leaders

spend a majority of their time with their staff, but States (2012) finds that principals spend 70% of their time fulfilling administrative needs and only 30% of their time with teachers or in classrooms. Additionally, States (2012) has found that one of the greatest differences between effective and mediocre principals is the amount of time they spend monitoring staff performance.

In a 2012 presentation at the Wing Institute ([winginstitute.org](http://winginstitute.org)), Addison states that the most common complaint of employees is that they lack clear feedback from their supervisors. Addison emphasizes the importance of continuing to shape employee behavior and argues that this is a central component in moving an organization forward. Similarly, Keyworth (2012) argues that performance feedback is integral to the development of top performers. Keyworth criticizes schools for failing to differentiate between low and high performers, and suggests that excellent performance is often followed with more work, which is punishing rather than reinforcing. When the best employees are given the work of struggling employees, excellence is not being reinforced and, consequently, there is little incentive for superior performance. To have excellent teachers, schools must have systems that recognize and reward outstanding performers. Keyworth (2012) emphasizes that the measures schools use to determine teacher success must be valid and reliable and must consider the process and outcomes. Additionally, Keyworth (2012) suggests that these measures must be conducted frequently and must be transparent to teachers. Lastly, Keyworth (2012) emphasizes that reinforcers and punishers should be delivered in a timely manner and should be effective and guided by data-based

decision making (2012).

Applying business models to schools provides clarity in regards to how the organization must behave and, as importantly, to how the principal must behave. Because principals have such a widespread and significant impact on student outcomes, it is integral to train principals to be better leaders (States, 2012). Implementing PBS and initiating sustainable systemic change requires good organizational health. Implementing systemic change with a weak leader would hold back an organization. It is integral that principals receive training so they can maximally benefit their organization and implement the most effective systemic changes. In discussing options for rescuing failing schools, Rhim and Redding (2011) note that every type of transformation except school closure requires an exceptional leader. They suggest that even effective teachers cannot continue to be effective without strong leadership. Rhim and Redding (2011) note that Louisiana, which has an exceptional number of failing schools, is shifting its focus from training principals to become strong leaders, to identifying strong leaders and training them to manage a school. Effective leadership and performance feedback has a great impact on the efficacy of PBS implementation and its value is additionally explored in Gilbert's Performance Engineering framework (1978).

### **Performance Engineering**

Gilbert's (1978) Performance Engineering model evaluates six components in a 2 by 3 diagram where Gilbert crosses individual versus environmental components with information, instrumentation and motivation (see Appendix B).

This results in six categories: data, resources, incentives, knowledge, capacity, and motives, all of which Gilbert suggests are inter-reliable. Addison (2012) suggests that data, which includes performance feedback, is the most integral component to organizational success and is also the component most often lacking. In describing performance feedback and expectations, Keyworth (2012) suggests that three things guide both teacher preparation and external systems: knowing what to do, how to do it, and being motivated to do it. Keyworth (2012) states that these can be problematic when teaching methods lack an evidentiary basis, when teachers lack effective feedback and clinical training, and when teachers are opposed to data-based methods. These barriers are significant when seeking buy-in for, and when teaching PBS. Overcoming these barriers, operationalizing expectations, and delivering performance feedback are essential to implementation of PBS. When evaluating an individual's performance, it is integral to also determine whether they possess the resources (ex. hours, flexibility, supplies) necessary to effectively complete their job. Similarly, it is critical to determine whether they have the capacity to be an effective employee. A lack of capacity may be informative of a need for training or a revision in hiring practices. It is also important that an individual have the motive to succeed. This is closely related to hiring practices, since organizations should seek to hire employees whose values are similar to those of the organization. Meglino, Ravlin, and Adkins (1989) explore the effect of value congruence between organizations and employees and explain that greater value congruence between organizational leaders and workers leads to greater job satisfaction and greater investment in the

organization's success. Gilbert (1978) also emphasizes, there should be incentives for superior work and consequences for poor performance so that all employees are held to a set of standards that are consistently enforced through pre-determined consequences. Performance feedback may also be motivating and may drive some educators to become top performers. Applying Gilbert's (1978) Performance Engineering model to school performance, and specifically to PBS, allows one to evaluate schools as any other business and elucidates improvements that are important components of exceptional organizational management.

## CHAPTER 4 — Evaluation of Behavior Support Challenges

Although schools are typically successful in implementing Tier I and Tier II support within PBS, the skills and resources to effectively implement Tier III still remain a challenge (Lewis-Palmer, Bounds & Sugai, 2004; Borgmeier, in prep). Literature consistently indicates that FBAs are effective in explaining the triggering antecedents, setting events, and maintaining consequences of problem behavior, and that BIPs are effective at ameliorating or removing problem behavior (Horner, 1994; Sugai, Lewis-Palmer, Hagan-Burke, 1999). However, the effectiveness of an FBA or BIP becomes irrelevant when systems are not in place to ensure that it is implemented correctly and with fidelity.

Bombara, Nonemacher, and Kern (2009) have conducted a study in which they evaluate barriers to effective implementation of PBS. One of the most prominent issues they have found is that schools lack a supportive culture and engage in actions inconsistent with their beliefs. Chitiyo & Wheeler (2009) have conducted a similar study in which they have discovered that time constraints, resources, and large class sizes are the most significant obstacles. While these barriers are significant impediments to effective implementation of behavior supports, they are also significant impediments to running an effective school. By addressing problems with effective implementation of FBAs, one may also be addressing broader issues across the school. Because FBAs can be challenging and because schools have limited resources, it is integral to identify and ameliorate issues that may be impeding the success of the FBA.

Initial studies identifying barriers to individualized behavior supports have found that the extent to which staff at a school support each other is linked to the success of a FBA. Bambara, Nonnemacher, and Kern (2009) have determined that in order for individualized support systems to be effective, school staff must be supportive of each other and there must be strong leadership. Similarly, Chitiyo and Wheeler (2009) found that collaboration across school faculty was essential to successful implementation of a FBA. Behavior team members' lack of involvement during implementation of the FBA may be explained by diffusion of responsibility. Forsyth, Zyzniwski, and Giammanco (2002) assigned participants to groups of varying size and found that as group size increased, personal responsibility for the success or failure of the group decreased. Furthermore, as group size increased, individuals tended to identify one individual as more responsible for the outcome of the group and others as less responsible. This could explain why there tends to be more responsibility placed upon teachers and why other members assume lesser roles. Diffusion of responsibility could also explain why members other than the student's main teacher inconsistently fulfill group obligations in assisting with the FBA and BIP. Assigning staff members to particular roles could potentially mitigate this problem. Cialdini (2006) suggests that individuals want to appear to themselves and others as behaving in a consistent way. When individuals are assigned a particular role and make a public commitment to fulfill a that role, they are more likely to follow through so that they will be perceived as behaving in a consistent manner. Behavior support teams that do not assign roles to staff members may place

more responsibility upon the teacher and may have more inconsistent implementation across the school as compared to teams that clarify roles.

FBA's can be time consuming to develop and implement and, because of the limited resources within schools, educators can face the false dichotomy of whether to devote time and money to students needing individual support or to the general school population (OSEP Center on Positive Behavioral Interventions and Supports, 2000). However, developing solutions to barriers of effective PBS implementation will likely assist in minimizing administrators' hesitancy to invest in struggling individuals. Similarly, developing tools that practitioners can implement to evaluate barriers to effective PBS implementation would also be highly beneficial to the process.

Horner, Todd, Lewis-Palmer, Irvin, Sugai, and Boland (2004) describe a tool titled the School-wide Evaluation Tool (SET), which they have created to measure the efficacy school implementation of PBS at the tier I level. This focus on primary prevention enables schools to build capacity through PBS and is critical to its success. The SET is easy for practitioners to use and has such a high predictive validity that if schools score 80% or higher on the SET after initial implementation, they will have a 20% or greater reduction in office discipline referrals that year (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004). The SET is especially effective because it is easy enough for practitioners to use and consequently enables schools to self-evaluate their implementation efficacy.

Another tool, called the Individual Student Systems Evaluation Tool (ISSET) is similar to the SET in that it evaluates PBS implementation, but differs in that it focuses on tier II and tier III levels of support (Anderson, Lewis-Palmer, Todd, Horner, Sugai, & Samson, 2012). However, a key problem preventing the widespread use of the ISSET is that it is so technical that only highly skilled researchers are capable of employing it (T. Lewis, personal communication, April 12, 2013). This is partly because the ISSET requires an evaluation of the suitability of reinforcements and punishments within a FBA, and an analysis of the overall strength of a FBA. Consequently, one must not only possess the ability to develop a FBA, but one must be skilled enough to evaluate one within behavior analytic framework. In practice, those who complete the ISSET are typically university professors or PhD students, and it would be beneficial to develop a tool that eliminates reliance on these individuals.

The current research examines (1) challenges that schools in a Pacific Northwest school district face when developing and implementing a FBA and (2) the effectiveness of an interview tool to evaluate tier III implementation in schools. The researchers examined the barriers to implementation for similarities and differences across staff positions (teacher, behavior specialist, and administrator) and education levels (elementary and middle school). This project employs data that Borgmeier (2011) at Portland State University collected by conducting 16 semi-structured interviews with staff from a school district in the Pacific Northwest. The research questions are (1) what are the barriers to effective implementation of the FBA across

all schools and positions, (2) what differences are evident across education levels and staff positions, (3) what solutions do school staff identify as potentially beneficial to the development, implementation, and maintenance of an FBA, and (4) how effective is this tool for identifying barriers to effective implementation of tier III behavior support practices.

## CHAPTER 5 — Method

### **Participants**

The study examines data gathered at a school district in the Pacific Northwest. The participants from these schools include administrators, behavior specialists, special education teachers, and general education teachers who have had a student requiring behavior support within the last year. The school staff must have worked together on the FBA and must have been teaching for at least one year. All teams were asked to identify a student for whom they had recently conducted a FBA, and staff members at each school were interviewed about their experience with that particular student. The teams were selected because of their involvement with the district's PBS support team.

All schools were within the same district, and two of the schools were elementary schools while two schools were middle schools. Because students do not move to different classrooms in elementary school in the same way that they do in middle school, this has a significant impact on the development and implementation of an FBA. When a student is in elementary school, the FBA is almost entirely implemented in their main classroom (in contrast with lunchtime, art, recess, etc.,) and is written to accommodate constraints on the main teacher. When a student moves classrooms, an FBA can be written for each of the student's classrooms, for one classroom in which they are struggling, or for a combination of these. Having multiple plans is inherently more complex and demanding of frequent and clear communication across the behavior support team. Additionally, when there is more

variety in the student's environment, and when the student is older, it is typically more difficult to develop a FBA. A student's age is important when writing a FBA because interventions that work for younger students (ex. win a sticker for 10 minutes of work, time out in the corner, etc.) may not be appropriate for older children.

### **Materials**

The researchers analyzed data from 16 previously conducted interviews. The researchers who conducted the semi-structured interviews asked participants questions regarding their experience in their school and, specifically, their experience with implementation of the FBA. The surveys were conducted in an open-ended manner in which the researcher posed a question and only offered guidance if the interviewee needed clarification or if the response lacked detail. Three different interview forms were used; one designed for teachers, one for behavior specialists (Appendix A), and one for administrators. All interviews included the same questions about successes and barriers to the development and implementation of a FBA, as well as the interviewee's goals for the student and for the broader behavioral support process. Furthermore, there were questions about each individual's experience with other team members and about the teaming process as a whole. However, there were some discrepancies among the interviews to maximize the information obtained from individuals in different roles. The administrator interview included questions about how one managed behavior support teams and how one held members accountable. The behavior specialist interview

included questions about how one was identified for one's position and how one enacts his role within schools. The general educator and special educator interviews did not include questions that were significantly different from any that were asked in the administrator or behavior specialist interviews. Borgmeier's team transcribed these interviews, which serve as the basis for the data analysis.

To analyze each school's efficacy of implementation of PBS, the researcher developed a numeric code, which allows the interviews to be coded and analyzed in a uniform manner. The data was also analyzed within Gilbert's Performance Engineering framework (Appendix B). This framework allows for the analysis of school staff's behavior the way that one would analyze employee behavior in an organization. There is much to be learned from analyzing schools in the way that one may analyze a business (Redding, 2012; Redmon & Keyworth, 2012), and this framework allows for this type of analysis. Applying the principles of effective business management to schools may help to elucidate some of the ways in which schools can support excellent teacher performance and enhance staff ability to teach and manage behavior.

### **Procedure**

The researcher first developed a code so that information from the interviews could be analyzed in an objective manner (Appendix C). The code was developed such that each question and sub-question that the participant answered had a corresponding set of possible answers that were numerically coded. The researcher identified these answers by reading through all of the interviews and identifying

what each participant was conveying. Similar responses were grouped into a category and multiple categories were formed for each question. Some questions that had little to no overlap in answers were thrown out since they did not provide information that was helpful to the analysis. Additionally, the first question in the behavior specialist interview was thrown out since it asked the behavior specialists to explain how they were identified for their position. This resulted in staff detailing their educational history, which was not helpful in exploring the research questions. The code was compiled such that the same responses were available for each question, regardless of the participant's role at the school. This allowed the researcher to compare data across positions. The code evolved from its initial state in which it contained many highly descriptive responses, to its current, briefer version, which allows similar responses to be collapsed into categories and, more importantly, possesses the power for a thematic analysis. A second researcher coded 31% of the interviews and an inter-rater agreement of 70.2% was obtained. The lowest agreement on an interview was 54% and the highest agreement was 87%. There were five interview questions out of 33 total questions for which researchers could not obtain agreement, so data from these questions was not analyzed. With these five questions excluded, the inter-rater agreement is 79.7%.

The coded interviews were segregated into groups so that the researcher could perform comparisons across education level and the participant's position at the school. The researcher then conducted a theme analysis with each of these segregations to obtain similarities and differences. The researcher also evaluated

data from all of the interviews within the context of Gilbert's Performance Engineering framework. Finally, the researcher holistically evaluated the data obtained from the interviews and evaluated the strengths and weaknesses of the data collection process.

## CHAPTER 6 — Results

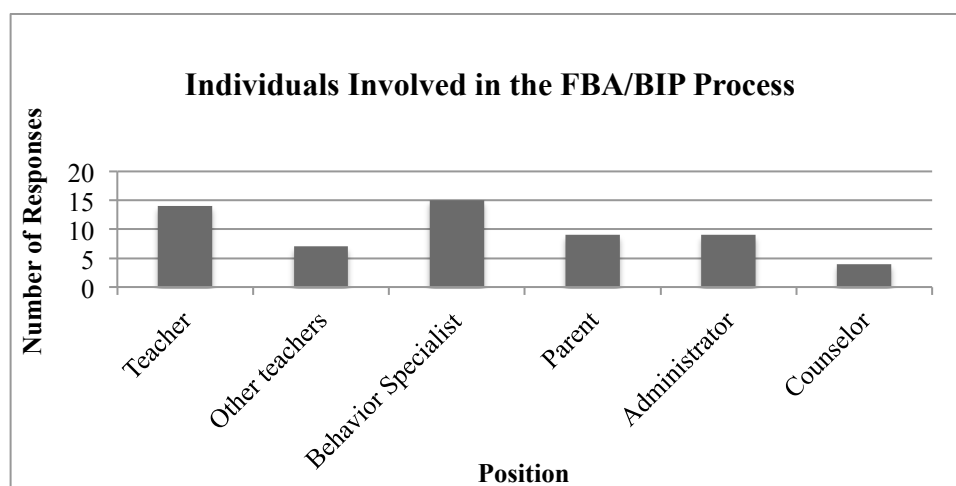
The 16 interviews revealed a variety of barriers to effective implementation of behavior support practices. Results are discussed in light of staff expectations for student support, the teaming process, successes, barriers, and potential solutions. Additionally, the usefulness of the interview process is evaluated according to the data that was obtained.

### **District-Wide Themes**

**Expectations.** Of twelve respondents, four stated that their hope was to place the student on a behavior plan while two stated that they hoped to have consistency across school staff in how the student's behaviors were handled. Two of the five teachers who responded said that they desired classroom tools to assist with managing student problem behavior.

**The Teaming Process.** The 16 respondents indicated that there were a variety of supports provided during the FBA-BIP teaming process. The most frequently reported support was the presence of the behavior support team (N=12) and school-wide behavior support systems (N=5). Other supports included individualized assistance for the student (N=4), having a preliminary behavior support plan that was derived from staff impressions of the behavior rather than an FBA (N=3), and having a full evaluation of the student (N=1), which included psychiatric and learning evaluations. There were six respondents who indicated that the process of developing a team consisted of the behavior specialist working with the student's teacher. There were no other responses about the teaming process. When asked

about who was involved in the FBA, respondents gave a variety of answers (Figure 1). The following chart lists the individuals the respondents mention, and the frequency with which each individual is said to participate in the process.

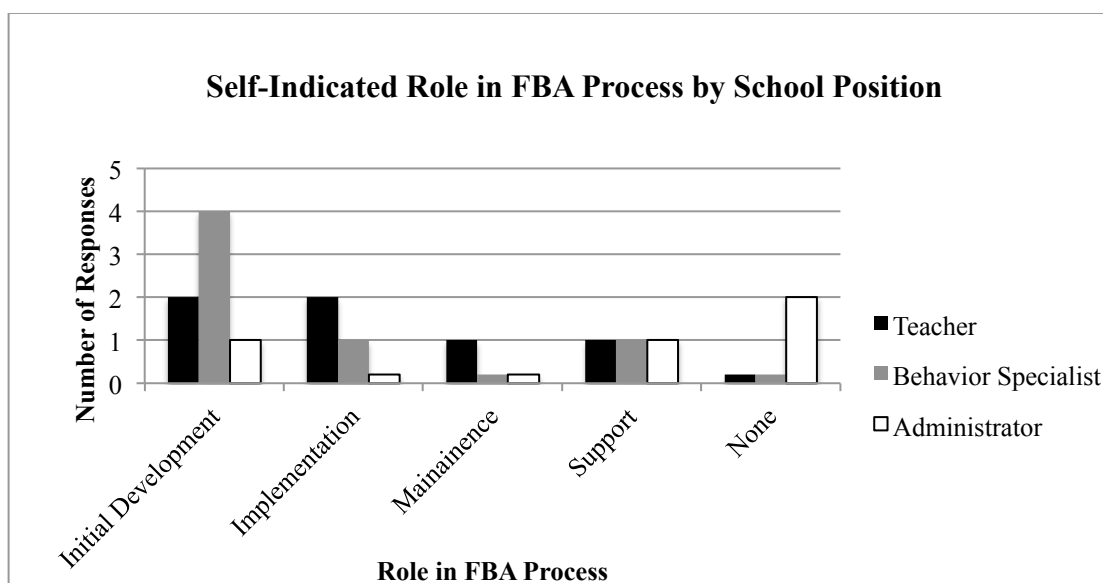


*Figure 1.* Tally of individuals cited as being involved in the FBA/BIP process

As evidenced, teachers and behavior specialists were noted as almost always being involved in the FBA process. Parents and administrators were the next most frequently involved individuals, followed by other teachers (e.g., reading teacher, PE teacher, recess monitor) and counselors. When asked who was missing from the process, respondents most frequently noted that no one was missing from the process (N=5). Respondents also stated that administrators (N=3), other teachers (e.g. librarian, art teacher, etc.) (N=2), parents (N=2), and counselors (N=2) were absent or uninvolved.

When questioned about the role of the FBA in the overall process, five staff noted that it was the natural next step after school-wide PBS interventions failed to

adequately support the student. Four staff explained that the behavior support planning process involved continual revisions of the FBA and two staff said that the FBA was used to track the student's progress. Interviewers also asked school staff about their role in the process. Of the 16 staff interviewed, only 9 responded to this question. Seven indicated that they were involved in initial development, three indicated that they were involved in the implementation of the behavior intervention plan or involved with general support, and one indicated that he was involved in maintenance of the plan. Two staff indicated no involvement in the FBA (Figure 2). The following graph displays involvement in each stage of the FBA by school position for the nine respondents.



*Figure 2.* Staff members' self-indicated role in the FBA process

As evident in the graph, behavior specialists were disproportionately involved in the

initial development of the FBA, although teachers had some involvement. Both behavior specialists and teachers were highly involved in the implementation of the FBA, but teachers were exclusively involved in the maintenance of the plan. Administrators tended to have little involvement in the FBA, or to not have any involvement. Although teachers and administrators infrequently reported being part of the initial development, seven respondents stated that interventions within the FBA were selected through a team process.

**Successes in the FBA Process.** Teachers, behavior specialists, and administrators all reported that the most successful aspects of the behavior support planning process included having the involvement of a behavior specialist (N=8), having a team of staff who were aware of the child's needs and who worked together to meet them (N=4), having a FBA (N=3), and having an outside perspective on the student's behavior (N=2). Five staff reported that the FBA helped guide them through the process and three staff reported that it helped to identify areas for improvement in current practices. Staff reported that supports in the implementation process included having a behavior specialist in the classroom to help manage student behavior (N=3), and having a teacher who was willing to modify schedules to implement interventions (N=3).

In addition to questions about success within the general process, respondents also answered questions about positive contributions from staff members in other positions. Of the 9 teachers and administrators, five said that behavior specialists were reported as being most helpful by providing tools to use in the classroom. One

individual said that moral support from the behavior specialist was very helpful, as was contact with the student's parents (N=1) and background information on the student (N=1). The twelve teachers and behavior specialists reported that administrators were most helpful by being consistently involved in the behavior support process (N=5). When this level of involvement was not possible, administrators were cited as being most helpful when they could provide general support (N=2) or when they maintained contact with the student's family (N=1). Behavior specialists and administrators stated that teachers were most helpful by taking an active role in the implementation (N=5) and one staff noted that the teacher was helpful by having a personal connection with the student with problem behavior.

**Barriers in the FBA Process.** There were a number of barriers that teachers, behavior specialists, and administrators noted in the FBA process. Staff stated that the FBA was not helpful in that there was too long a period of time in-between interventions when one was unsuccessful (N=3), that it was too much work (N=2), and that it was too difficult to identify reinforcers for the student. Staff also noted that the FBA did not provide new information (N=1) and was unresponsive to student needs (N=1). Of the 16 respondents, two noted that they felt there were no limitations to the actual FBA.

Staff also noted a number of challenges to the behavior support process such as limited implementation of the behavior plan across the school (N=2) and in the student's main classroom (N=2). When there was a limited implementation of the intervention, staff members most often reported the cause as inconsistent

implementation (N=3), although school staff also stated that teacher resistance was responsible (N=2).

Because staff members in different positions function differently in the behavior support planning process, all respondents were asked about how staff in other positions may have limited the FBA process. Behavior specialists were said to limit the process by not spending enough time with the student for who they were designing a plan (N=2). In one case, they were said to give advice that did not account for constraints on classroom teachers. Administrators were most often reported as being involved in the beginning but abruptly ending their support (N=4), as being unsupportive (N=3), or by being uninvolved in the process (N=2). Teachers were most often cited as limiting the process by lacking an investment in the student (N=3), or being inflexible (N=1).

**Potential Solutions.** When asked about what supports may help the behavior support planning process, seven staff members said that increased support from other faculty members would be helpful. Four staff members said that wraparound support for the student, such as home support or counseling, would benefit the process. Two teachers felt that increased support after the behavior specialist left would help them adjust to managing the student's behavior on their own. Additionally, two staff said that earlier school-wide PBS would support the tier III behavior support planning process. When asked what would be necessary to make the process work, staff most often reported that earlier support for the student (N=2), better communication (N=1), greater home support (N=1), and greater teacher involvement in the plan

(N=1) would be necessary. There was one staff who felt that additional placement options for students would be beneficial, and one staff who felt that ongoing training after PBS workshops would be beneficial. Of the 16 respondents, ten reported that FBA training across the whole school would be beneficial. Two individuals expressed that the FBA was viewed as a tool for special education and that general education teachers were reluctant to employ it until initial attempts to work with a difficult student were unsuccessful.

### **Themes by Staff Position**

Although teachers, behavior specialists, and administrators offered somewhat differing responses, there were few clear differences across each position. Because there were only five teachers, seven behavior specialists, and four administrators, the small sample size and variability of responses prevented generalizations of many responses. However, there were some notable differences.

**Teachers.** When describing what made the process successful, teachers primarily cited support from the behavior specialist and never cited the FBA. Teachers tended to struggle to provide information about the development of the FBA but were able to describe classroom implications. Additionally, only two of the five teachers reported involvement in the development of the FBA, despite the fact that when administrators and behavior specialists explained how interventions were selected, they all stated that it was through a team process. Teachers generally felt that the FBA did not provide new information, possibly because they lacked involvement in the process even though they were the ones to most frequently

witness the student engaging in the problem behavior.

When describing aids that would have assisted the process, teachers were most likely to cite support from other school staff. Teachers stated that administrators were generally uninvolved and that when they did take part in the process, they did not taper their support. Teachers also noted that behavior specialists did not spend enough time with students. Lastly, teachers and behavior specialists felt that there was inconsistent implementation across the school, and that this was a significant barrier to the success of a FBA.

The lack of consistent implementation and involvement in the FBA from other staff members may be a result of diffusion of responsibility. Since there are many individuals involved in supporting a student's FBA, staff members may expect others to enact the FBA and may not take an active roll. The current data suggests that because teachers have the most contact with students, the teachers tend to become the primary individual responsible for implementation of the FBA. This outcome supports Forsyth, Zyzanski and Giammanco's (2002) findings regarding the diffusion of responsibility in groups and the tendency to assign greater responsibility to particular members. Assigning particular roles to group members may compel behavior support team members to fulfill their obligations and may lead to broader implementation of the FBA (Cialdini, 2006).

**Behavior Specialists.** Behavior specialists were more frequently involved in the behavior planning process than teachers or administrators, and were also most likely to cite benefits to the FBA. Although two comments about drawbacks to the

FBA were from behavior specialists, nearly all (N=9) were from administrators and teachers. Behavior specialists did note that some teachers lacked involvement in the student and that teacher resistance and inflexibility was a problem. Because teachers had little involvement in the behavior support planning process and because the process resulted in them being given specific interventions to implement in their classrooms, their resistance, inflexibility, and lack of investment in the process may be explained by Brehm's (1966) reactance theory. Including teachers in the process may allow them to feel more autonomous and may lead them to be more engaged.

**Administrators.** Administrators tended to have a more positive view of the behavior support process than teachers or behavior specialists. When asked who was absent from the planning process, administrators only ever reported that no one was missing (N=3), while neither teachers nor behavior specialists ever gave this response. Similarly, administrators only ever stated that interventions were selected through a team process (N=2). Administrators primarily stated that they served in a supportive role in the behavior support planning process in which they assisted when teachers or behavior specialists needed their support, but did not play a key role (N=2). When questioned about problems to behavior support planning, administrators stated that a lack of communication (N=2) and teacher resistance (N=2) were the most significant obstacles.

### **Themes by Education Level**

Because the age of a student and the structure of a school day both have significant impacts on an intervention, the barriers, supports, and potential solutions

to behavior support planning were analyzed between elementary and middle schools. Because some interview questions did not provide enough data across both schools to form a consensus about behavior support planning at that particular educational level, this analysis is based only on those questions that did provide enough information.

**Elementary.** There were a number of consistencies across the nine staff in the two elementary schools. In both schools, the most common objective was to develop an appropriate behavior plan for the student (N=4). Although a variety of individuals were involved in behavior support planning, the three most common participants were teachers (N=9), behavior support specialists (N=8), and parents (N=6). A behavior support plan was typically sought as the natural next step after school-wide interventions had been unsuccessful for the student (N=5), and teachers and administrators most often stated that they hoped to gain classroom tools from the behavior support process (N=3).

Another barrier at the elementary level was a lack of teacher and administrator involvement in the FBA. Nearly all teachers and administrators (4 of 5) stated that they had no involvement in the FBA, and the only staff members to claim involvement were behavior specialists. At the same time, staff cited one success of behavior support planning as having a team of involved individuals (N=4). A lack of teacher involvement is evident in teachers and administrators' struggle to discuss key elements of the FBA and of the behavior support planning process. Without a solid understanding of the process, it may be difficult to manage

one's expectations for the plan and to assist in the development of a plan. School-wide FBA training may mitigate this problem and may lead to more realistic expectations of behavior support planning.

Staff also emphasized a lack of communication across the behavior support team (N=3) and stated that for this process to be successful, they would need assistance from other school staff (N=4) and more wraparound support (e.g. home support, counseling, etc.) for the student (N=3). Greater parent involvement may clarify out of school obstacles that are preventing the student from being successful and may assist the support team in ameliorating these problems. Team members also reported that parents had made promises to seek services for their child and then failed to do so. Providing supports that increase parent follow-through and that clarify behavior problems outside of school may lead to more accurate and effective behavior support plans and may allow for the implementation of antecedents that enable school success.

**Middle School.** There were also many consistencies across the seven respondents who described behavior support planning at the middle school level. However, unlike behavior support planning at the elementary level, those involved in the process were primarily teachers (N=5), behavior support specialists (N=7), and administrators (N=6). Only two respondents stated that a parent was involved in the process. Administrators were cited as being consistently involved (N=4) and teachers were mentioned as taking an active role in the implementation (N=2) but lacking investment in the student (N=2). Staff stated that the two most helpful

aspects of behavior support planning were behavior specialist support (N=3) and the FBA (N=2). Generally, staff felt that more support from other school staff (N=3) and earlier school-wide PBS (N=2) would be critical to mitigating the process.

Two staff members stated that there was limited implementation of the FBA in the student's main classroom and three stated that the primary reason for limited implementation was inconsistency across staff. Because middle school students have multiple teachers, there are more staff members who must adhere to the FBA and communicate with each other. It is unsurprising that it was difficult for multiple staff members to all implement the behavior plan in a consistent manner. For example, one staff stated that he differed from his co-workers in what he considered a behavior that merited punishment. This type of inconsistency highlights the importance of operationalizing problem behaviors and developing clear action plans. It may also be valuable to create team cohesion so that staff members are driven to enforce aspects of the plan they may not support in order to act as a consistent and unified behavior support team.

Middle school staff also stated that they felt they lacked the resources necessary to fulfill their jobs. While time and personnel constraints did not appear to differ significantly across education levels, it was clear that staff at the middle school level needed access to tools to assist them in the development of more complex behavioral contingencies for students. Since middle school students were less reinforced by teacher attention and small prizes in the way that elementary school students were, teachers at the middle school level had more difficulty arranging for

reinforcing or punishing consequences.

Middle school staff also tended to feel that they lacked training in how to conduct and execute a FBA, and six of the seven staff felt that FBA training across all school staff would be helpful. This may be more apparent to middle school staff since contingencies are harder to develop, student behavior is more difficult to control, and the behaviors tend to be more complex and to require greater skill to assess. Many staff also felt that the FBA was implemented too late, partly because general education teachers viewed the FBA as a tool for special education. Training about the variety of uses for a FBA may be valuable in minimizing this assumption, which may drive teachers to employ the FBA as soon as a student shows behavior problems, rather than after the student's problems have escalated and the teacher is seeking outside support.

### **Performance Engineering Framework**

An analysis of the barriers to development, implementation and maintenance of an FBA through Gilbert's performance engineering framework allows for a systems wide analysis of the barriers, and elucidates areas in which the overall FBA process could be improved (Table 5.1).

**Data.** Gilbert's (1978) framework suggests that improvements in performance feedback could benefit the behavior support process. One individual cited increased communication across staff as necessary for effective behavior support planning and three individuals stated that inconsistent implementation was a key reason for limited success of the FBA. States (2012) argues that performance feedback is one of the

Table 5.1

*Analysis of School Needs Within Performance Engineering Framework*

	Information	Instrumentation	Motivation
Environment	<b>Data:</b> <ul style="list-style-type: none"> <li>• Communication across staff</li> </ul>	<b>Resources:</b> <ul style="list-style-type: none"> <li>• Classroom tools</li> <li>• Additional placement options</li> <li>• Earlier or more SWPBS</li> <li>• Earlier support for student</li> <li>• Better wraparound support</li> <li>• More in-house support</li> <li>• More effective FBA (and better ecological validity)</li> <li>• Support from counselor</li> <li>• FBA was too much work for outcome</li> </ul>	<b>Incentives:</b> <ul style="list-style-type: none"> <li>• Recognition</li> </ul>
Individual	<b>Knowledge:</b> <ul style="list-style-type: none"> <li>• FBA training across school</li> <li>• Help identifying support</li> <li>• Help identifying appropriate consequences</li> <li>• Help with how to enforce consequences</li> </ul>	<b>Capacity:</b> <ul style="list-style-type: none"> <li>• Post-training mentoring</li> <li>• Support after behavior specialist leaves</li> <li>• Initiate FBA earlier</li> </ul>	<b>Motives:</b> <ul style="list-style-type: none"> <li>• Investment in student</li> <li>• Flexibility</li> </ul>

most critical aspects to improving an organization and adopting systemic change. Increased communication and performance feedback may have lead to more cohesive behavior support teams and may also have lead team members to hold each other accountable, which may have assisted in improving consistency across staff.

**Knowledge.** Staff felt that they needed more knowledge about the behavior support process in order to be successful. Two staff noted that FBAs tended to be viewed by general educators as tools that were only used in special education. One staff explained that it would be valuable for everyone to have an understanding of the FBA process so that FBAs may be started earlier in general education classrooms and so that school-wide PBS and other behavior support practices could truly be school-wide initiatives. One staff also noted that it would be valuable to have further knowledge about how to identify appropriate supports for a student, and another noted that it would be valuable to have training on how to identify reinforcers for the student. All of these statements suggest that more training in the FBA process and more practice in developing behavior support plans would be beneficial to school staff.

**Resources.** Teachers, behavior specialists, and administrators suggest that they would like more resources in the form of classroom tools (N=3), placement options for struggling students (N=1), and support from other staff (N=7). Three out of five teachers stated that they needed additional classroom tools to manage difficult behavior and they cited this as something they hoped to gain from the process. One staff member desired alternate placement options (e.g. alternative schools or special

education) for the student with problem behavior, and four staff members desired better wraparound support to assist the student at home. Two individuals wished that the FBA process had begun sooner, or that the school had better school-wide PBS implementation so the student may have been immediately supported. Additionally, four out of five teachers felt that they were not being recognized for their work with the student, and they wanted more support and recognition from other staff members.

**Capacity.** Gilbert's framework also indicates that the FBA process could be improved by arranging the environment to increase staff members' capacity to perform their job. Every staff that had attended a FBA training spoke positively about it, and three individuals stated that they wanted more training as they worked to enact what they had learned. This type of ongoing support may be provided through ongoing technical assistance from someone who is experienced at writing FBAs, and may allow faculty to resolve questions that arise during the process and to more accurately enact what they have learned. Additionally, teachers reported that they had a difficult time after the behavior specialist left their classroom, and that it would be helpful for the behavior specialist to taper his level of support and continue to provide mentoring even after an effective plan is in place. Two teachers mentioned that they had trouble enforcing consequences, and three said that solely having an extra adult in their classroom made it significantly more manageable. Ongoing technical support could provide teachers enough knowledge about managing problem behavior to mitigate both of these problems. Lastly, staff members indicated that it would be helpful to begin the FBA process earlier. It

could have been helpful to have a number of individuals within a school that could assist in developing a behavior support plan for a student as soon as one begins to show severe problem behavior, rather than waiting for a behavior specialist to arrive. This may protect against teachers decreasing their investment in a student as the teachers become tired of managing the student's behavior, and may lead the student to earlier classroom success. Beginning the FBA process earlier, tapering behavior specialist support, and offering technical assistance after FBA trainings may allow staff to increase their capacity to effectively perform their jobs.

**Incentives.** School staff also described aspects of the behavior support process that Gilbert's (1978) framework indicates could be improved upon by modifying incentives related to the behavior support planning process. It may be beneficial for administrators to give more positive feedback to teachers, since the three staff members who cited significant administrator involvement said that it was helpful, and since the teachers who felt supported all had administrators who communicated well with them. One teacher who felt unsupported questioned why he was not receiving more feedback from his administrator since one of his students was reportedly the most difficult student in the school. Increasing communication between administrators and teachers may lead teachers to feel more supported and to have greater flexibility during the implementation of the behavior plan. Similarly, the FBA process may be more reinforcing for teachers if the FBA were initiated earlier, since teachers may not be tired of managing a particular student's behavior and since the FBA may provide more information at this stage. Improving upon

these two aspects may lead faculty to gain more from the FBA process, may cause the overall process to be more reinforcing, and may protect against a lack of investment in the student.

**Motives.** Gilbert's final category involves matching individuals' values and capabilities to company values and job criteria when hiring. Although staff members did not give responses that explicitly inform hiring practices, it is important to note that teachers were found to significantly inhibit the FBA process when they lacked investment in the student and when they were inflexible. These characteristics may largely be a function of the behavior support process starting after the teacher has worked with the student and is tired of managing his problem behavior. It may also, however, elucidate important characteristics that one should consider when hiring teachers. If some teachers lack tolerance for students with difficult behavior, this may be valuable to know when making hiring decisions.

### **Efficacy of the Data Collection Process**

The above results inform the usefulness of these semi-structured interviews to evaluate individualized student support. There are significant problems with the phrasing of some of the questions, with the fidelity with which questions were asked, and with the overall selection of questions.

Although the interview format elicited important information about some barriers to the process, many questions were misunderstood or were not answered by the participants and ought to be rephrased or discarded. When interviewers asked the respondents questions that contained the term "FBA," many respondents gave

limited answers or asked for clarification. Even when staff members explained the process of developing an FBA at their schools, staff members struggled to identify it as such. Since this term appeared to be infrequently used among teachers and tended to elicit confusion, it may be beneficial to remove it from the interview questions. Re-phrasing the questions to employ terminology practitioners use rather than what researchers use, may assist in obtaining better responses.

The second problem with the interview process is that many of the questions were asked with low fidelity. If semi-structured interviews are used to evaluate individualized student support systems, then interviewers should be trained to ask all of the questions in the interviews. Adopting a more rigid interview framework may assist in ensuring that all of the questions are asked and that participants answer each question.

The third problem with these structured interviews is that some questions elicited responses that participants had already given, and some responses that would have been key to the analysis of the process were never prompted. To ameliorate this problem, it may be beneficial to frame the interview within the context of Gilbert's (1978) Performance Engineering framework, since this framework is intended to highlight systems-wide problems. Designing questions within this framework may result in a broader variety of questions (e.g. role of performance feedback and incentives) and fewer repetitive questions (e.g. resources that were helpful).

## CHAPTER 7 — Discussion

Although there are a variety of problems with the semi-structured interviews that were used in data collection, there are a number of barriers to effective implementation of the FBA that can be identified through the data.

### **Barriers and Solutions**

There are four overarching barriers to behavior support planning, which include teacher resistance, inconsistent implementation, lack of knowledge about the FBA process, and lack of resources. Solutions to the barriers are (a) early implementation, (b) more frequent communication, (c) further training in the FBA process, and (d) greater resources.

Of the schools involved in the study, those that had greater success with the FBA implemented it earlier. Late implementation of the FBA may have lead to some of the issues that the staff members discussed, such as a lack of new information from the FBA and a lack of teacher involvement in the FBA. Late implementation tended to result in teachers individually managing problem behavior for an extensive amount of time, which may have contributed to their lack of investment in the student and their lack of investment in the process. Increasing teacher involvement in the FBA planning process would be beneficial since teachers spend more time with students than any other faculty and since teachers may have the most information to contribute to the FBA.

Lack of knowledge about the FBA process is the second key barrier. Nearly every staff member said they felt it would be beneficial to have school-wide PBS

training with later on-going technical support. This training may also benefit behavior support specialists, since some struggled to discuss the FBA process. This is disconcerting since the primary role of a behavior specialist is to guide those developing the FBA. Greater knowledge about the support process may also lead to more realistic expectations about the FBA. Many individuals stated that there was too much time between interventions and many were quick to identify an intervention as ineffectual. Interventions can take time to become effective, and some actually cause the behavior to worsen before it improves. Frustration with the intervention may reflect a belief that behavior support planning constitutes a quick fix for problem students when, in practice, managing a student's behavior is often an enduring process. More education about behavior support planning may result in more realistic expectations about the FBA process.

A third, overarching barrier is poor communication among staff members. Given that faculty reported behavior support teams as consisting of many members, frequent and clear communication of the FBA would have been necessary to ensure consistent implementation. Many staff members also reported that they wanted more support from their co-workers, which may be improved by increasing faculty awareness of current behavior support plans. More frequent and widespread communication may lead school faculty to become more aware of FBAs within the school and may foster an environment in which general education teachers have greater appreciation for their colleagues who are managing challenging students. Increasing awareness may also enable other adults to enact the plan, which could

increase the level of implementation and may help the child become more successful.

It may be beneficial to encourage a leader on the behavior support team to ensure that other members attend weekly meetings or have daily email communications.

Improved communication should also extend to performance feedback, since some administrators were reported as being distant from the teacher's implementation of the FBA and since some teachers wanted feedback from their supervisors.

Encouraging administrators to spend more time in teacher's classrooms, and encouraging them to plan times in which they will deliver performance feedback may help to increase both administrator involvement and feedback. Overall, clearer and more frequent communication may increase the implementation of a plan, may result in greater support for those enacting it, and may generate more performance feedback.

Staff identified a number of resources that they believe will assist them in the behavior support process. These include more support from the school community, more home support for the student, and earlier school-wide and individualized PBS intervention. Although home support for the student may require outside resources, school support and earlier PBS may both need to be encouraged through changes in school culture. Teachers also stated that it would have been beneficial to have additional placement options for difficult students. Although some students' behavior may merit alternate placements, it may be more important to improve the FBA process and to increase education about behavior support planning before altering the course of a difficult student's education. Nevertheless, increasing staff

involvement in an FBA, providing increased technical assistance, and developing resources to increase home support may allow behavior support teams to more effectively support students.

### **Limitations**

Because this study is a pilot for future research, there are many limitations. One issue is that the results from this study are predicated on self-report measures rather than behavioral measures. Although the interview process provided some data, the effectiveness of this process and the identified barriers to behavior support planning may be better evaluated with ancillary objective measures of staff performance and student behavior. To better evaluate the outcomes of the FBAs, it would be valuable to obtain materials related to the specific FBAs that school teams discussed. Although it may be more beneficial to observe an entire behavior support planning process at a number of schools, this would not be practical for a practitioner and thus could not be built into a tool intended for practitioners. However, obtaining other student data such as referrals and academic performance may help to offer a broader and more objective perspective of the difficulty of behaviors that the schools were managing, which may inform staff difficulties throughout the process.

Another limitation is that researchers interviewed only two elementary schools and two middle schools, both of which are in the same district in the Pacific Northwest. This limitation may be mitigated by the fact that barriers identified in this study are in alignment with barriers identified in previous research (e.g. Bambara, Nonnemacher, & Kern, 2009; Chitiyo & Wheeler, 2009). Because PBS is

a systems-wide method of organizing a school environment, schools that use PBS have similar methods of managing student behavior and organizing behavior support teams, and these schools have been found to experience similar barriers.

Nevertheless, the small and centralized population in this study prevents one from generalizing the data beyond the district from which it was taken.

The third key limitation is that some of the questions in the interview were weak and elicited poor responses, while questions about other important aspects of the process were missing. Questions that included the term “FBA” tended to confuse respondents and may have been more helpful if behavioral jargon was substituted with terms that were more familiar to schools (ex. the student’s plan instead of FBA). Questions about the teaming process elicited few responses, and it may have been worthwhile to ask the respondents more specific questions (ex. who organized the team, who ran the FBA meetings, etc.), since these may have guided the respondent through a narrative describing what the original question was intended to ask. The study may have also benefitted from questions about how the teams operated, how individuals were selected for participation in the support team, and whether anyone was in charge. Most of the questions in the semi-structured interviews asked about knowledge and resources that the respondent would like to have for the FBA process, while important questions about performance feedback, performance based contingencies, and the job capabilities were not included. Framing the interview questions within Gilbert’s (1978) Performance Engineering framework may prevent questions that lead to repetitive responses and may offer a

broader perspective of the planning process.

An additional limitation was that researchers obtained low inter-rater reliability. Because many respondents struggled to directly answer questions, and because many spoke in incomplete or incoherent sentences, it was difficult to determine what each respondent was conveying. Additionally, many interviewers did not ask all of the interview questions or strayed from the interview guidelines. Five of the interview questions had inter-rater reliabilities of less than 40%, and were consequently excluded from the analysis. Were the code to contain fewer, broader categories, reliability would likely have increased. However, doing so would result in information with limited value. Given that increasing reliability would likely result in broad and uninformative results, and given that the data was unclear, inconsistent, and incomplete, it can be concluded that these semi-structured interviews merit extensive alterations. Although these interviews would be easy for a practitioner to conduct, they do not fully evaluate school-wide implementation of individualized student supports. Adopting a more rigid interview process, revising questions, and obtaining objective measures of FBA development and implementation would be necessary to accurately evaluate tier III implementation.

### **Implications**

Because the FBA is legally mandated for all students who are considered for special education, it is essential that organizational barriers to the effective implementation of an FBA are identified and resolved. Although there are a variety of studies identifying barriers to the behavior support planning process (e.g.,

Bambara, Nonnemacher, & Kern, 2009; Chitiyo & Wheeler, 2009) none of these studies consider barriers through an organizational behavioral framework, such as Gilbert's (1978) Performance Engineering framework. Analyzing school staff's behavior through an organizational framework allows for the evaluation of systems-wide problems through a systems-wide approach. Identifying and ameliorating the contingencies that lead to barriers may permit school staff to develop FBAs with greater contextual fit and may lead to more effective and efficient implementation. This, in turn, may better serve the student and may offer them a greater chance at success within a general education classroom.

In order to mitigate barriers to student support, it is necessary to develop a system that effectively identifies obstacles to success. Although this interview protocol requires modifications, it did elicit valuable information about the process and it serves as a foundation for future research. This pilot study provides groundwork for the development of an interview process with questions with better response rates, and for the revision of questions that were often misunderstood or unanswered. It would be beneficial to write the interview within the context of Gilbert's (1978) Performance Engineering framework in order to clarify systemic problems (e.g. asking an administrator "How do you reward staff who excel with difficult students?"). Additionally, future research could extend the study to include a variety of school districts with different student populations and different monetary and personnel constraints.

## CHAPTER 8 — Conclusion

Violent and disruptive student behavior is a key concern in schools. Not only is it necessary to mitigate this behavior so that other students can learn in a controlled and safe classroom environment, but there are significant positive implications for assisting students who have problem behaviors (Walker, Colvan, & Ramsey, 1995). PBS is an affordable, systems wide method of organizational change that is founded upon the principles of behavior analysis. PBS requires staff-driven systemic changes that improve organizational effectiveness and that are individualized to possess a high contextual fit. Designing and implementing an effective FBA within PBS framework requires excellent communication, knowledge of the process, and basic resources. Effective implementation of PBS has repeatedly been found to result in behavior change and school success for students with problem behavior (e.g. Sugai, Lewis-Palmer & Hagan-Burke, 1999; OSEP, 2000).

The present research examines barriers and potential solutions to the FBA process and evaluates the usefulness of the semi-structured questionnaire used in data collection as a tool for practitioners to analyze barriers to individualized student supports in schools. Key solutions to barriers include earlier implementation of the FBA, more frequent communication among staff members, increased knowledge about the FBA process, and greater access to resources. Although significant modifications to the tool are necessary, it serves as a foundation for evaluating individualized student supports and may be improved with the integration of Gilbert's (1978) Performance Engineering framework.

## Bibliography

- Addison, R. (April, 2012). Performance architecture: The art and science of improving organizations. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Adelman, H. S., & Taylor, L. (2011). Expanding school improvement policy to better address barriers to learning. *Policy Futures in Education*, 9, 431-436. doi:10.2304/pfie.2011.9.3.431
- Anderson, Lewis-Palmer, Todd, Horner, Sugai, & Samson. (2012). *Individual Student Systems Evaluation Tool Version 3.0* [Tool]. Retrieved from [http://www.pbis.org/common/pbisresources/publications/ISSET\\_Manual\\_3.0.pdf](http://www.pbis.org/common/pbisresources/publications/ISSET_Manual_3.0.pdf)
- Baer, D. M., Wolf, M. M., & Risley, T. R., (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1, 91-97. doi:10.1901/jaba.1987.20-313
- Bambara, L. M., Nonnemacher, S., & Kern, L. (2009). Sustaining school-based individual positive behavior support. *Journal of Positive Behavior Interventions*, 11, 161-176. doi:10.1177/1098300708330878
- Blonigen, B. A., Harbaugh, W. T., Singell, L. D., Horner, R. H., Irvin, L. K., & Smolkowski, K. S. (2008). Application of economic analysis to school-wide positive behavior support (SWPBS) programs. *Journal of Positive Behavior Interventions*, 10, 5-19. doi:10.1177/1098300707311366
- Blood, E., & Neel, R. S. (2007). From FBA to implementation: A look at what is actually being delivered. *Education and Treatment of Children*, 30, 67-80. doi:10.1353/etc.2007. 0021
- Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf P. J. The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. (2008). *Journal of School Psychology Quarterly*, 23, 462-473. doi:10.1037/a0012883
- Brehm, J. W. (1966). A theory of psychological reactance. In Burke, W. W., Lake, D. G., & Paine, J. W. (2009). *Organization change: A comprehensive reader: Vol. 155. J-B Warren Bennis Series*, (pp. 377-390). San Francisco, CA: Jossey-Bass.

- Broussard, C. D., & Northup, J. (1995). An approach to functional assessment and analysis of disruptive behavior in regular education classrooms. *School Psychology Quarterly*, 10, 151-164. doi:10.1037/h0088301
- Carr, E. G., Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., Sailor, W.,...Fox, L. (2002). Positive behavior support: evolution of an applied Science. *Journal of Positive Behavior Interventions*, 4, 4-20. doi:10.1177/109830070200400102
- Center of Learning and Growth. (2013). DCOM Model. Retrieved from <http://www.clg.com/Science-Of-Success/CLG-Methodology/Organizational-Change-Tools/DCOM-Model.aspx>
- Center on Innovation & Improvement. (2008). *School turnarounds: Actions and results*. Public Impact, Academic Development Institute.
- Chitiyo, M. & Wheeler, J. J. (2009). Challenges faced by school teachers in implementing positive behavior support in their school systems. *Remedial and Special Education*, 30, 58-63. doi:10.1177/0741932508315049
- Cialdini, R. B. (2006). *Influence: The psychology of persuasion*. Retrieved from <http://books.google.com/books?id=5dfv0HJ1TEoC&printsec=frontcover&dq=isbn:0061899879&hl=en&sa=X&ei=YIV5UdrgAeeOiAKIhIHIBg&ved=0CDMQ6wEwAA#v=onepage&q&f=false>
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2<sup>nd</sup> ed.). Upper Saddle River, New Jersey: Pearson.
- Detrich, R. (April, 2012). A descriptive approach to measuring a school Culture. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Detrich, R. & Lewis, T. (in press). A decade of evidence-based education: Where are we and where do we need to go? *Journal of Positive Behavior Interventions and Supports*.
- Dunlap, G., Kern-Dunlap, L., Clarke, S., & Robbins, F. R. (1991). Functional assessment, curricular revision, and severe behavior problems. *Journal of Applied Behavior Analysis*, 24, 387-397. doi:10.1901/jaba.1991.24-387
- Forsyth, D. R., Zyzanski, L. E., & Giammanco, C. A. (2002). Responsibility diffusion in cooperative collectives. *Personality and Social Psychology Bulletin*, 28, 54-65. doi:10.1177/0146167202281005

- Gilbert, T. F. (1978). *Human competence: Engineering worthy performance*. USA: McGraw-Hill.
- Grimes, J., & Tilly, W. D. (1996). Policy and process: Means to lasting educational change. *School Psychology Review*, 25, 465-476.
- Horner, R. H. (1994). Functional assessment: Contributions and future directions. *Journal of Applied Behavior Analysis*, 27, 401-404. doi:10.1901/jaba.1994.27-401
- Horner, R. H., Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Interventions*, 6, 3-12. doi:10.1177/10983007040060010201
- Ingram, K., Lewis-Palmer, T., & Sugai, G. (2005). Function-based intervention planning: Comparing the effectiveness of FBA function-based and non-function-based intervention plans. *Journal of Positive Behavior Interventions*, 7, 224-236. doi:10.1177/ 10983007050070040401
- Keyworth, R. (April, 2012). The critical role of culture in school improvement. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Lewis, T. J., Jones, S. E. L., Horner, R. H., & Sugai, G. (2010). School-wide positive behavior support and students with emotional/behavioral disorders: Implications for prevention, identification and intervention. *Journal of Exceptionality*, 18, 82-93. doi:10.1080/ 09362831003673168
- Lewis-Palmer, T., Bounds, M., & Sugai, G. (2004). Districtwide system for providing individual student support. *Assessment for Effective Intervention*, 30, 53-65. doi:10.1177/ 073724770403000105
- Lewis-Palmer, T. Todd, A. Horner, R., Sugai, G. & Sampson, N. (2003). Individual student systems evaluation tool educational and community supports, University of Oregon.
- Martin, G., & Pear, J. (2007). *Behavior modification: What it is and how to do it* (8<sup>th</sup> ed.). Upper Saddle River, New Jersey: Pearson.
- McIntosh, K., Horner, R. H., & Sugai, G. (2008). Sustainability of systems-level evidence-based practices in schools: Current knowledge and future

- directions. In Sailor, W., Dunlap, G., Sugai, G., Horner, R. (Eds.), *Handbook of Positive Behavior Support* (pp. 327-352). doi: 10.1007/978-0-387-09632-2
- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74, 424-432. doi:10.1037//0021-9010.74.3.424
- OSEP Center on Positive Behavioral Interventions and Supports. Sugai, G, Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., ... Ruef, M. Applying positive behavior support and functional behavior assessment in schools. (2000). *Journal of Positive Behavior Interventions*, 2, 131-143.
- Redding, S. (April, 2012). What is missing? Human capital and change management. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Redmon, W., & Keyworth, R. (April, 2012). Creating culture change: Getting beyond the conventional boundaries. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Rhim, L. M., & Redding, S. (2011). *Fulcrum of change: Leveraging 50 states to turn around 5000 schools*. Lincoln, IL: Center on Innovation and Improvement.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. USA: Crown Publishing.
- Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2012). *Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. USA: Crown Publishing.
- States, J. (April, 2012). Principals as agents of change. *Seventh Annual Summit on Evidence-based Education*. Symposium conducted at the meeting of Wing Institute, Berkeley CA.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality*, 17, 223-237. doi:10.1080/09362830903235375
- Sugai, G., Horner, R., & McIntosh, K. (2008). Best practices in developing a broad-scale system of school-wide positive behavior support. In A. Thomas & J. P. Grimes (Eds.), *Best practices in school psychology V* (Vol. 3, pp.765-780).

Bethesda, MD: National Association of School Psychologists.

Sugai, G., Lewis-Palmer, T., & Hagan-Burke, S. (1999). Overview of the functional behavior assessment process. *Exceptionality*, 8, 149-160.  
doi:10.1207/S15327035EX0803\_2

U. S. Department of Education. (2001). *No child left behind act of 2001* (Public Law 107-110). Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>

VanAcker, R., Boreson, L., Gable, R. A., & Potterton, T. (2005). Are we on the right course? lessons learned about current FBA/BIP practices in schools. *Journal of Behavioral Education*, 14, 35-56.

Walker, H. M., Colvan, G., & Ramsey, E. (2005). *Antisocial behavior in school: Strategies and best practices*. USA: Brooks/Cole.

Zins, J. E., & Ponti, C. R. Strategies to facilitate the implementation, organization, and operation of system-wide consultation programs. (1990). *Journal of Educational and Psychological Consultation*, 1, 205-218.  
doi:10.1207/s1532768xjepc0103\_1

## APPENDIX A

## Semi-Structured Interview Protocol Behavior Specialist

Name \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ District \_\_\_\_\_

### **INTRODUCTION**

This study is focused on challenges and facilitative supports encountered in implementing behavior intervention plans for students with problem behavior in mainstream school settings. We are interested in understanding your perspective on the primary difficulties to implementing individual interventions for students with the most challenging behavior in schools. Functional behavioral assessments (FBA) have been recommended practice for the development and implementation of behavior plans in schools, but schools have more or less struggled to use FBAs consistently and effectively. We would like you to share your experiences and thoughts related to implementation of behavioral interventions in schools. We are trying to identify specifically what works and what doesn't, so that we can support teachers better to support positive behavior in students.

First, we need to read through and get your informed consent.

### **<GIVE INFORMED CONSENT>**

Throughout the interview think about your recent experience with **<insert name of target student>**, this is a student with challenging behavior you have worked with to implement a behavior intervention plan in your classroom and/or school. For this interview reflect on the process for providing behavior support (intervention team, student support team, behavior specialist, consultant, administrator, etc.) to this student with challenging behavior. Please provide frank, honest answers as such responses will be most helpful.

### **Demographic Questions:**

What is your Position in your district or school? \_\_\_\_\_

Are you a Behavior Specialist in a building? \_\_\_\_\_ Y \_\_\_\_\_ N

If Yes, which building? \_\_\_\_\_

Are you a Behavior Specialist for more than one building in your district?  
Y \_\_\_\_\_ N \_\_\_\_\_

If Yes, describe the buildings or programs you work with? \_\_\_\_\_

How much FTE do you have set aside to serve as a Beh Spec.? \_\_\_\_\_

Rate the effectiveness of the Behavior Management Skills of the teacher of your target student on the 1 to 4 scale below:

	Not Effective/			
Extremely	Chaotic			
Effective				
Classroom-wide	1	2	3	4
Individual Student	1	2	3	4

### **Semi-Structured Interview Questions**

1. Briefly describe your experiences and skills that led you to be selected or identified as the behavior specialist?

#### Potential Follow-Up Questions

Why were you identified to be the behavior specialist in your school/ district?  
 What skills are necessary to be an effective behavior specialist?  
 What training have you received (university courses, staff dev't , etc.)?

2. What were your hopes and expectations when <Name of Target Student> was referred for help with his/her behavior?

#### Potential Follow-Up Questions

When did you first hear or know that this teacher needed support for this student's challenging behavior?  
 What are the outcomes you hope to see achieved through the process of behavioral support for teachers and challenging students?

3. Describe the supports provided and teaming process to support <Name of Target Student>.

#### Potential Follow-Up Questions

Who was involved in this process?  
 Who do you feel was missing or not as actively involved in the meetings or process as necessary?

Describe how was FBA a part of this process.  
 What was your involvement in the FBA?

How did the team decide on the final behavioral interventions to implement?

4. Throughout the process, what did you feel was successful and helped to provide supports to <Name of Target Student>?

Potential Follow-Up Questions

Describe how the FBA was helpful.

What helped with implementation of the plan?

Describe things that the administrator did that were helpful.

Describe things that the teacher did that were helpful.

5. What was not successful and what hindered the team's ability to support <Name of Target Student>?

Potential Follow-Up Questions

Describe how the FBA was not helpful.

Describe those things that made this process challenging or less productive than you had hoped.

Describe challenges that got in the way of successfully developing a behavior plan.

Were there aspects of your behavioral intervention which were not implemented consistently?

Describe reasons for limited implementation.

Describe things that the administrator did or did not do that may have limited this process or implementation of the intervention plan

Describe things that the teacher did or did not do that may have limited this process or implementation of the intervention plan.

6. What supports or resources would have helped in this process with <Name of Target Student>?

Potential Follow-Up Questions

What would be necessary to make this process work consistently in your school?

Describe additional district supports that are necessary to support effective implementation of behavioral interventions.

Describe any additional training that could have helped you to better participate in this process and implement the behavioral intervention.

7. As a Behavior Specialist, describe your responsibilities and the role you play in the teaming process for students requiring individualized behavior intervention plans?

How regularly do you attend behavior intervention planning meetings?

What role do you play in the functional behavioral assessment?

What are your responsibilities related to implementing the behavioral intervention?

As a behavior specialist how do you hold team members accountable to the teaming process and implementing the intervention plan?

8. Is there anything more that you feel is important in understanding barriers and supports to conducting FBA and developing and implementing individual behavioral interventions for students with challenging behavior in schools?

That is all the questions I have, do you have any questions for me?

We very much appreciate your participation.

Thank you!

## APPENDIX B

## Gilbert's (1978) Performance Engineering Framework

	<b>Information</b>	<b>Instrumentation</b>	<b>Motivation</b>
<b>Environment</b>	<i>Data</i> 1. Relevant and frequent feedback about the adequacy of performance 2. Descriptions of what is expected of performance 3. Clear and relevant guides to adequate performance	<i>Resources</i> 1. Tools, resources, time, and materials designed to match performance needs	<i>Incentives</i> 1. Adequate financial incentives made contingent upon performance 2. Non-monetary incentives made available 3. Career-development opportunities 4. Clear consequences for poor performance
<b>Individual</b>	<i>Knowledge</i> 1. Systematically designed training that matches the requirements of exemplary performance 2. Placement	<i>Capacity</i> 1. Flexible scheduling of performance to match peak capacity 2. Job aids 3. Physical shaping 4. Adaptation 5. Selection	<i>Motives</i> 1. Assessment of people's motives to work 2. Recruitment of people to match the realities of the situation

## APPENDIX C

**Interview Code****1. Hopes/Expectations**

- a hopes/expectations
  - find reinforcers 1
  - help with classroom success 2
  - organize a team 3
  - id triggers 4
  - support teacher 5
- b Desired outcomes
  - put student on plan 1
  - consistency across staff 2
- c Desired supports
  - classroom tools 1
- d Factors affecting decision to escalate support
  - Very disruptive 1
  - Student behind academically 2
  - want guidance 3
  - initial plan not working 4
  - severe initial behavior 5

**2. Supports Provided and Teaming process**

- a Supports provided
  - BS team present 1
  - SW BS 2
  - 1:1 assistance 3
  - Full evaluation of student 4
  - preliminary plan 5
- b Teaming Process
  - BS work with teacher 1
- c Who was involved in process
  - Teacher 1
  - Other teacher (library, PE) 2
  - Behav Specialist 3
  - Parent 4
  - Admin 5
  - Counselor 6
- d Who was missing/not as involved
  - Teacher 1
  - Other teacher (library, PE) 2

	Behav Specialist	3
	Parent	4
	Admin	5
	Counselor	6
	No one	7
e	How was FBA a part of the process	
	ID problems to focus on	1
	continual revisions	2
	Id strategies	3
	track progress	4
	next step after SW interv.	5
f	Involvement in FBA	
	Initial devleopment	1
	Implementation	2
	Maintainence	3
	None	4
	Support	5
g	How did you decide on interventions	
	Whole school movement	1
	Personal observation	2
	Team process	3
	Given directions	4
	<b>3. What was successful</b>	
a	what was successful	
	BS support	1
	FBA	2
	everyone on board	3
	outside perspective	4
b	How was FBA helpful	
	guideline for what to do	1
	id areas for improvement	2
c	What helped with implementation	
	extra body in classroom	1
	teacher willingness	2
d	What did behav. spec do that was helpful	
	Lots contact with parents	1
	moral support	2
	give tools/ideas for help	3
	background	4

- e What did admin do that was helpful
  - involved, consistent 1
  - willing to step in (less involved) 2
  - contact with student family 3
- f What did teacher do that was helpful
  - connection with student 1
  - takes active role in implem. 2
- 4. What was not successful and hindered team**
- a How was FBA not helpful
  - too formal 1
  - too long btwn interventions 2
  - not responsive to needs 3
  - too much work 4
  - hard to id reinforcer 5
  - didn't provide new info 6
  - It wasn't not helpful 7
- b What made process challenging/less productive
  - lack support from counselor 1
  - lack consistency 2
  - lack support (general) 3
  - lack resources 4
  - lack communication 5
  - FBA implemented too late 6
- c Challenges to successful development of behav plan
  - identifying appropriate SR+ 1
  - trouble id'ing supports 2
- d Aspects of intervention with limited implementation
  - Lack implementation across school 1
  - main classroom 2
- e Reasons for limited implementation
  - lack continued in-school support 1
  - maintainence in 1 classroom only 2
  - teacher resistance 3
  - inconsistent implementation 4
  - ineffective plan 5
- f What did behav. spec do to limit process/implementation
  - not enough time with student 1
  - unhelpful advice 2
  - drop-off in support 3

	infrequent check-ins on plan	4
g	What did admin do to limit process/implementation	
	Uninvolved	1
	unsupportive	2
	didn't taper support	3
	Nothing	4
h	What did teacher do to limit process/implementation	
	inflexible	1
	lack investment in student	2
<b>5. What supports or resources would have helped</b>		
a	what supports or resources would have helped	
	more "in-house" support	1
	more support after BS leaves	2
	more wraparound support (home)	3
	More/earlier SWPBIS	4
b	What would be necessary to make processs work	
	greater home support	1
	earlier support	2
	better communication	3
	teacher involvement in plan	4
c	Additional district supports needed	
	additional placement options	1
	post-training mentoring	2
d	Additional training	
	appropriate consequences, how to enforce	1
	FBA training across whole school	2
<b>6. Responsibilities/role in teaming process for FBAs</b>		
a	Regularly attend behav meetings	
	No	0
	Yes	1
b	Role in FBA	
	development of fba	1
	consultant	2
	observations	3
	consequences	4
	Support (general)	5
c	Responsibilities related to implementing intervention	
	implement incentives	1
	teacher support (modeling)	2

How do you hold team members accountable to team process &  
d implementation

honest discussions

1

lots communication

2

