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TERTIARY FIRST STEP TO SUCCESS: A PROCESS EVALUATION OF THE HOME COMPONENT

by

CHARLOS THOMPSON

BA, MSSW

A Dissertation

Submitted to the faculty of the

Raymond A. Kent School of Social Work of the University of Louisville

In Partial Fulfillment of the Requirements

for the Degree of

Doctor Of Philosophy

Social Work

University of Louisville

Louisville, Kentucky

May 2014

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TERTIARY FIRST STEP TO SUCCESS: A PROCESS EVALUATION OF THE HOME COMPONENT

CHARLOS THOMPSON

BA, MSSW

A Dissertation Approved on

April 14, 2014

By the following Dissertation Committee:

_____

Dr. Bibhuti Sar

_____

Dr. Armon Perry

_____

Dr. Amy Lingo

_____

Dr. Janet Ford

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ABSTRACT

TERTIARY FIRST STEP TO SUCCESS: A PROCESS EVALUATION OF THE HOME COMPONENT

Charlos Thompson

4/14/2014

Children with severe behaviors have prompted the response of educators and family interventionists to develop innovative behavioral solutions to address this growing concern. Within the last few years, collaborative behavioral interventions have emerged demonstrating promising solutions for classroom teachers and concerned families. As part of a 3-year study, a U.S. Department of Education (Institute for Education Sciences) development grant was awarded to the Kent School of Social Work. Researchers from the University of Louisville and Oregon Research Institute developed a version of the First Step to Success program for children requiring tertiary-level support. This dissertation examines fidelity levels, social validity, and proximal outcomes associated with the home component-Tertiary homeBase of the enhanced version of First Step. The implications and recommendations for future research are presented.

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CHAPTER 1

PROBLEM STATEMENT

Children with challenging behavior will likely encounter long-term negative consequences if not treated at the early age of onset (Briggs-Gowan, Carte, Skuban , & Horwitz, 2001; Domínguez, Vitiello, Maier, & Greenfield, 2010; Hay, Hudson, & Liang, 2010). These children will cope with prevalent social problems that linger well into their adult life and will likely face elevated obstacles that hinder education and career objectives (Hester, Hendrickson, & Gable, 2009; Lee, 2010). A longitudinal study conducted by Lavigne et al. (2010) showed that a little more than 50% of two and three year-olds identified as having aggressive and poor social skills will continue to exhibit these behaviors up to two years later without effective intervention strategies. More children with these types of problems are entering the classroom, forcing unprepared teachers to grapple with solutions that effectively address these behaviors. As adverse conditions continue, in spite of teachers' best efforts, odds of academic and social success diminish – leading to behavior that is more difficult in the later years of children's development (Parker, Nelson, & Burns, 2010). Even more so, research suggests children's unmitigated negative behavior fuses into undesirable adult responses that often lead to adverse outcomes. Loe, Lee, Luna, & Feldman, 2011).

Over the years, there has been a number of examples where education-research joined with family-interventions to counter children's adverse behaviors (Baker, Arnold, & Meagher, 2011; Burns, 2011; Caughy et al. 2012). In fact, in 2006 the Department of Education estimated the number of family funded programs connected to school interventions increased significantly from previous decades (Gay, 2007). It seems this growth in spending toward collaborative family-school interventions is a response to support the effort to counter negative childhood behaviors.

Defining Challenging Behavior. Researchers often define challenging behavior as aggressive engagements, anti-social, or non-compliant behavior toward established rules (Stormshak & Webster-Stratton, 1999). For instance, Bulotsky- Shearer, Domínguez, Bell, Rouse, and Fantuzzo (2010) describe challenging behavior of children as difficult to manage and overly active during structured activities, but not necessarily aggressive. They continue by suggesting children with challenging behavior frequently move from activity to activity with minimum compliance to adult commands, directions, and instructions. In addition, these types of behaviors require constant attention, correction, and guidance due to the child being unable to complete or keep to classroom procedures and rules (Drugli, Fossum, Larsson, & Morch, 2010). Johns, Crowley, and Guetzloe (2008) suggest that a distinguishing feature of challenging behavior is the amount of excessive care and attention it demands from adults. Thus, challenging behavior is that which consumes disproportionate amounts of

the classroom period or family events, requiring teachers and parents to repeatedly remind and redirect the child, leaving adults exhausted from efforts to keep the child on task.

Furthermore, behavior problems influence many aspects of a child's life. A child's academic and education goals suffer immensely, social relationships become damaging, and many other important life variables are impacted due to the child's challenging behavior (Hay, Hudson, & Liang, 2010; Henry & Thornberry, 2010; Lane, Barton-Arwood, Nelson, & Wehby, 2008; Loe et al. 2011). In fact, data on academic achievement are dismal for school age children with challenging behavior. Ak and Sayil (2006) research on the association between academic failure and poor behavior reveals a cyclical relationship between these two entities. Their study of 438 school age children accurately predicts academic outcomes based upon the child's behavior. Not surprisingly, the results suggest children with greater behavior problems were more likely to fail in academic areas compared to children with lesser conduct issues. Similarly, Maag and Katsiyannis (2010) call these negative outcomes debilitating and detrimental toward social growth and educational progress. They suggest these children will face underachieved learning goals and mounting negative social circumstances (e.g., failing grades, negative labeling), coupled with higher rates of school failure, as they move toward upper-grade levels.

More specifically, the impact of challenging behavior is often seen in the increasing number of behaviorally challenged children entering the classroom

(Gillespie & Durlak, 1995; Hoagwood et al. 2007; Guercio, 2011). One study showed a 14% increase over the last five years in the number of early school-age children who have pre-established behavioral problems entering school for their first year (Montes, Lotyczewski, Halterman, & Hightower, 2012). Interestingly, many of these children will most likely lag behind their peers academically throughout their early years of school. In fact, a study conducted by Montes et al. (2012) with 1200 parents showed these children were 5.2 times more likely to be behind grade level throughout their primary school years. Nelson, Jolivette, Leone, and Mathur (2010) explained many of these behavior problems will continue throughout the early schooling process, accelerating them toward greater negative classroom and social outcomes.

Furthermore, the education research literature details the negative relationships that develop between teacher, school and the behaviorally challenged child. This research tells us children that persistently poor behavior will likely slip toward adverse interactions with classroom teachers and school personnel. Wagner, Sumi, Woodbridge, Javitz, and Thornton (2009) describe this as often deleterious to the self-esteem of children, while quickening the child toward school failure. More specifically, a greater number of these students are being suspended due poor relationships between school personnel and the teacher (Jenson, 2007).

Description and Evolution of First Step to Success (FS). A large scale study by Walker et al. (2009) with early school age children showed an

overwhelming percentage of identified behaviorally challenged children having come from high at-risk families. In addition, the author suggested these behaviors often arise from societal issues, which include single parenting, early parenting, depressed communities, and disadvantaged schools. In response to these findings, researchers from the University of Oregon developed the early school intervention First Step to Success (FS). In the early 1990s, through the Office of Special Education Programs, The U.S. Department of Education awarded Dr. Hill Walker of Oregon Research Institute, the senior author of the FS intervention (Walker et al. 1998), a multi-year grant to conduct research on FS.

The project examined the impact of First Steps to Success program on early school-age children's behavior in the classroom. The First Step to Success (FS) program is based on the need for creating and improving the ecological conditions and behavioral outcomes of children in grades one through three (Horner, Sugai, Todd, & Lewis-Palmer, 2005). In order to achieve the stated behavioral objectives, the FS intervention focuses on improving academic engagement time and positive adaptive behaviors, reducing maladaptive behaviors, and cultivating positive relationships with peers. The program targets elementary school age children showing early signs of behavior problems. The intervention incorporates three modules: universal screening, school, and home. Descriptions of these modules are presented in chapter three of this dissertation.

The FS intervention materials were manualized for systematic use by practitioners and researchers. The First Step to Success program manual

includes implementation guides, a homeBase consultant guide, materials for classroom intervention, and videos for practical guidance.

The success seen with FS led to it being considered as a potential effective intervention strategy for addressing more severe challenging behaviors among early school-age children. This resulted in the eventual development of Tertiary First Step to Success (TFS).

Motivational Interviewing (MI) and Tertiary First Step (TFS). Through the work of Dr. Andy Frey and colleagues, First Step and Motivational Interviewing components were joined to address more severe types of behavioral problems. Originally, the application of Motivational Interviewing (MI) started with substance- abuse populations (Miller & Rollnick, 2002). MI approaches its clients in a unique fashion that is non-threatening, with a laissez-faire approach. This method allows the direction of the treatment goals to be determined more by the client rather than the therapist. Over the years, the intervention has been successful in improving the conditions of the addicted as well as working with various other types of populations such as diabetic and cancer patients (Miller & Rollnick, 2013). Given the research on MI's effectiveness with these various types of populations, distressed parents of difficult children seemed to be a good fit for this behavioral-based model.

Consequently, Tertiary First Steps (TFS) creates new connections between parents and schools while utilizing the added components of MI. The intervention combines the components of First Step with Motivational

Interviewing's unique client-centered approach. Clients (parents) are coached through the five steps of TFS and are encouraged gradually toward goals beneficial to the parent/child relationship. This is a time-limited intervention, which in time forms a working bond between the three participating parties, parent, child and TFS coach. In addition, the intervention has all the core components of First Step's, classroom components, maintenance phase and home components. Lastly, the intervention provides a concentrated element working with the teacher in one phase and the parent of the child in a separate phase. This unique comprehensive intervention seems to be a good solution for parents needing a rigorous intervention for children with challenging behaviors.

Research Questions

Research on parental interventions has brought to the forefront the importance of interventions being implemented with integrity, social validity, and effectiveness toward changed behavior (Frey, et.al., 2010). Although the literature on First Steps highlights its' ability to be implemented within acceptable fidelity and social validity levels, little is known about TFS' ability to produce similar outcomes. More importantly, little is known of the intervention's impact on parent attitudes. Consequently, three questions guide the direction of this study.

1. *To what extent was TFS' Tertiary homeBase module delivered with fidelity?*
2. *To what extent do parents believe that the Tertiary homeBase module is socially valid?*

3. *To what extent did the self-efficacy of parents increase after participating in the intervention?*

Significance of this Study to Social Work

The growing classroom behavior problem in today's schools magnifies the need for education-based behavioral tools such as TFS, but it also addresses the need for social work in classrooms. TFS fills an important role within the field of social work and offers an extended tool for primary-level educators. As a social-behavioral based intervention, TFS addresses social work objectives in utilizing evidenced–based models to address social problems. Particularly, TFS targets teachers and parent responses to negative externalizing behaviors while creating collaborative relationships between the child's classroom and home setting (Walker et al. 2005). Additionally, a growing trend in social work literature recommends efforts to include other vital systems as integral solutions to family issues (Stormshak & Dishion, 2009). This unique emphasis builds a bridge between two essential ingredients of success for school-age children, home and school. In addition, the use of TFS within school settings is consistent with the values of social work by utilizing teachers who bring to the classroom socialization role modeling. These attributes of teachers and the combining of this social-behavior model are a valuable contribution to the field of social work.

CHAPTER 2

LITERATURE REVIEW

The epistemology of children's difficult and problematic behavior ranges from multiple family and community dynamics to a complex web of social conditions. According to some theorists, the beginning of negative childhood behaviors and social skills often start from variant sources such as peers, community, and media influences (Bulotsky-Shearer, Domínguez, Bell, Rouse, & Fantuzzo, 2010; Karreman, Van Tuijl, Van Aken, & Deković, 2009). Particularly for the young (5-11 year olds), a large portion of these objectionable influences arise from family, and particularly parental interactions. Barnett, Shanahan, Deng, Haskett, and Cox (2010) elaborate on findings of early negative parental influences on developing children toward phases of poor coping abilities, and reinforcing detrimental behavioral outcomes. The authors conclude a strong connection between parenting and negative childhood behaviors. Similarly, Allen-Meares (2008) expounds on the connection between problem behavior and the large number of negative conditions that children are exposed to in chaotic family conditions and unsound classrooms. She suggests that the number of negative family interactions affecting children with challenging behaviors often exceeds the number of positive traits children need to navigate successfully through early years of life. More so, children may enter into the classroom

troubled by the impact of family conditions and in turn display poor behaviors, propelling them toward a path of more negative life experiences. Furthermore, research informs us that other mitigating factors may promote the tendency of challenging behavior which may include biological factors, Attention Deficit Disorder, language and cognition disorder, exposure to illegal substance or alcohol abuse, temperament, brain irregularities, and other genetic predispositions.

The following sections expand on proposed notions of problematic childhood behaviors, along with reasoning to promote tested parental interventions. In addition, a description of school-based and parent-based programs are provided, along with a concluding discussion on the need for parent interventions to be tested for fidelity, social validity, and efficacious outcomes.

Theoretical Groundwork

According to some in the field of human development, children learn from life experiences early on with a blank slate, or tabula rasa, and through dealings with variant parenting interactions (Finn, 1998). This would suggest that much of children's learning, including social learning, derives from the early exchanges they encounter through family and, particularly, parent relationships. Even more so, researchers such as Elizabeth Stormshak attribute much of children's negative behavior to the adverse experiences learned primarily from adverse parenting interactions (Stormshak & Webster-Stratton, 1999). Early social

learning often arises within the parental-child dyad and continues well into late stages of adolescents, and sometimes on to adulthood. Gerald Patterson proposes that the early influences of parenting practices and family experiences establish a pattern of behavior that last a lifetime (Patterson, DeBaryshe, & Ramsey, 1989). Ellen Skinner asserts that the influence of parenting demeanors gives clues to predictable responses of children, and a lasting effect on personalities (Skinner, Johnson, & Snyder, 2005). These early conditions form social learning proficiencies, and are crucial to understanding influences that promote negative behaviors that are undesirable in the home and classroom settings.

Moreover, we have known for some time that good behavior is influenced by exposure to various positive interactions, especially those with peers and adults (Finn, 1998). One could argue the importance of these interactions as vital to the proper conditioning of socially healthy children. An interactive relationship model (Figure 2.1) suggests the positive (plus sign) and negative (minus sign) interactions of parents, peers, and teachers on the social and behavior development process of children. Each interaction has potential influence on children's future behavior, suggesting positive interactions lead to positive behavior, and vice versa for negative interactions.

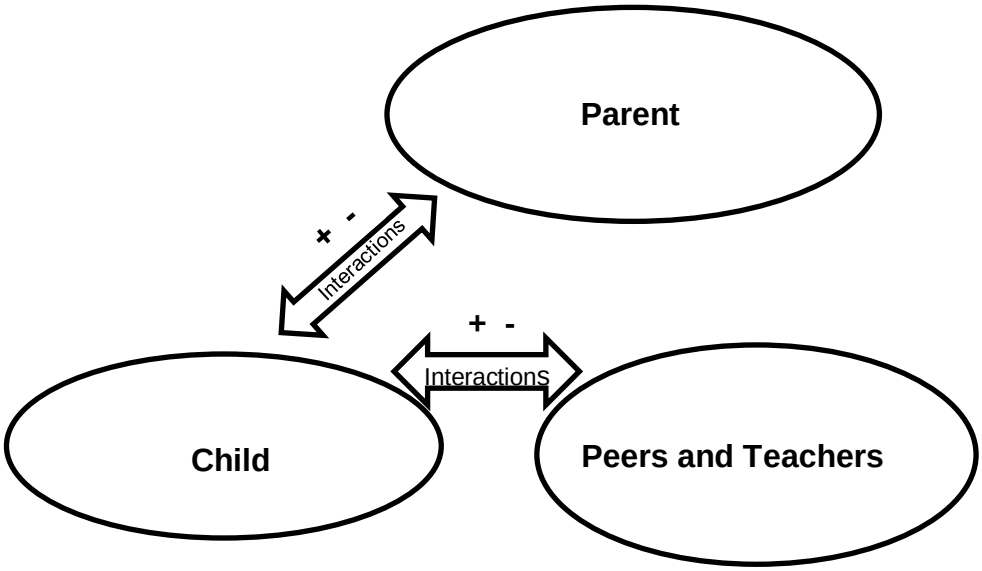


Figure 2.1 Interactive Relationships of Children

In her book, Essentials of Human Behavior, Elizabeth Hutchinson proposes a simple but broad notion that adds to the argument of the development of unpleasant child behaviors (Hutchinson, 2010). Hutchinson suggests children's negative behavior is often a reflection of patterns from negative interactions with peers or siblings but more closely promoted by means of negative or unpredictable parental interactions. In line with this reasoning, a review of the literature suggests a vast resemblance between children's adverse

behaviors and parents' undesirable reactions to unruly behaviors (Breevaart & Bakker, 2011; Brotman et al. 2011). Barnett (2010) highlights this mirroring effect through the various years of social interactions and shared dialogues between parent and child. This exchange of socialization transpires throughout the first few years of development (e.g., infancy, preschool and early adolescent) (Ansbacher, 1978; Wu, Messner, & Roberts, 2010), and continues throughout the child's development. Patterson, DeBaryshe, and Ramsey (1989) add that children's route toward behavioral difficulties is often preceded by negative contextual family variables and poorly demonstrated behavior practices. They use this as the context for explaining how patterns of severe discipline practices, inattentiveness to child's activities, and chaotic family conditions cultivates a poorly behaved child. In particular, they suggest that distressed parents become impatient with repetitive corrections of children's misconduct and often resort to more stringent and harsher methods, which often lead to negative responses from the child. As a result, children gradually imitate the poor role modeling which is eventually integrated into personality and behavioral performances (Patterson et al.,1989). These negative exchanges often lay the foundation for deprived behavioral conditions, which often lead toward difficult childhood and adult life-challenges (Briggs-Gowan, Carter, Skuban, & Horwitz, 2001).

Likewise, punitive and inconsistent parenting practices result in many negative consequences. Various social research studies attempt to discern in what manner punitive parental demeanors influences the behavior of children

and ultimately the long-term effect on their lives. A study done by Callahan, Scaramella, Laird, and Sohr-Preston (2011) showed overwhelmingly the powerful impact on children raised with parenting that resorts to harsh discipline and unpredictable disciplinary responses. In fact, several longitudinal studies have demonstrated the enduring negative results from these damaging types of parenting methods (Karreman et al. 2009). Moreover, the degree of fair and predictable parenting has been found to be a moderator for determining children's responses and behavior toward future social interactions. In their study categorizing the different parenting styles of authoritative, authoritarian and permissiveness and children's behavioral responses, Rinaldi and Howe (2012) detail the range of social responses of children and the learned pattern of behavior from these interactions. They suggest particular parenting styles have known effects on children's behavior. For instance, authoritative parenting, characterized by a demeanor of warmth and responsiveness, is associated with adaptive and socially adjusted childhood behaviors. Authoritarian parenting, characterized by a demeanor of rejection and demanding, is associated with mal-adaptive and poor social childhood behaviors.

Social-Ecological Environment of Children. Bronfenbrenner's (1979) ecological model conveys social systems (e.g., classrooms, homes, and communities) as elements of influence affecting people's behavior, character, and personality. This can be applied to understanding the development of

behavior and social skills of children as well, specifically when we focus on the parental subsystem's influence on children's behavior.

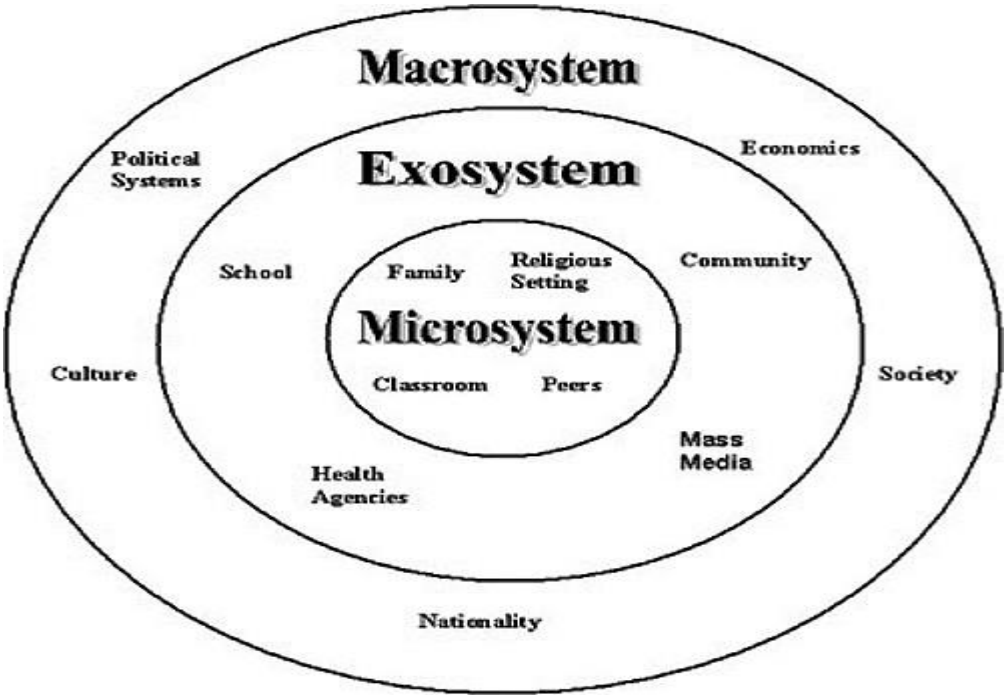


Figure 2.2 Bronfenbrenner's Socio-Ecological Systems (Reprinted from http://faculty.weber.edu/tlday/1500/systems.jpg)

Bronfenbrenner proposes three levels of systems that affect individuals' functioning (Figure 2.2). When applied to children, the outer level (macro system) entails broad social environments affecting the life of an individual child, such as the culture in which the child lives. Moving inward (exosystem), the child's school and community play an extensive role in influencing children's development and their behavior. Lastly, the inner circle (micro system) affects and molds the behavior of children through institutions such as the family and classroom.

With this in mind, the significance and similarity of social learning within home environments and education settings can be examined. For example, the school social work literature suggests problematic behaviors of children are socially learned early in life from poorly structured exosystems such as school environments and community conditions, and the system's inadequacies in meeting the needs of children (Votruba-Drzal, Coley, Maldonado-Carreño, Li-Grining, & Chase-Lansdale, 2010; Whipple, Evans, Barry, & Maxwell, 2010). Allen-Meares and Lane (1983) suggests negative externalizing behavior is often a counter response to poorly mismatched needs to resources. Furthermore, Connell et al. (2008) asserted that the role of deprived "microsystems'" in not providing basic social care for vulnerable children, simultaneously leads children to learn inappropriate socio-behavior responses to these unmet needs. It is here that we place the performance of caregivers as a large contributor to outcomes on children's socio-behavior, whether positive or negative. Therefore, the social-ecological framework assumes the microsystem as a large influence on determining the social outcome on individual children. More specifically, it may be that the parental system needs adjusting in order to correct the problematic misalignment of children with challenging behavior. This has become many family interventionist's central concern when working with distressed parents.

In addition, within the microsystem, Bronfenbrenner (1993) describes four entities as major influences (family, religious, classroom, peers). However, for the purposes of this research study, the influences of family and peers will guide

our discussion, with special attention given to parent behavior within the family as the major influence on child behavior. An example of a healthy microsystem for children would include a good match between a child's character (e.g., attitudes, skills, behavior or performance) and the beliefs, demands, expectations of the parent (Burns, 2011). However, a mismatch of the child's character with parenting practices causes negative consequences in the parent-child dyad, ultimately affecting the development process (Whipple, Evans, Barry, & Maxwell, 2010). In fact, research suggests children are impressionable to parental expectations, but if the demands of parents are beyond the child's abilities, frustration develops on both ends of the relationship and difficulties begin to emerge (Karreman, et.al, 2009).

Other Theoretical Concepts. Years of social and behavior research has taught us how differing theories add to the understanding of children's negative socio-behaviors (Figure 2.3). Loe et al. (2011) suggest the understanding of biological factors (e.g., poor health, physical disabilities) as a means to understanding the negative behavioral epistemology of young children. In addition, a consideration of pervasive childhood disorders (e.g., ADHD, autism, learning disabilities) enlightens our understanding of the increasing number of behaviorally challenged children. As an example, research indicates a correlated pattern between ADHD diagnosis and school disciplinary problems (Lane, et.al, 2008). In addition, Drugli, Larsson, Clifford, and Fossum (2007) illustrate how the increasing number of early behavioral disorders coincides with the growing

number of children diagnosed with delayed language development, reading impairment and learning disorders.

Other competing models suggest community attributes as a major influence on childhood behavioral conditions. Those advocating for healthy communities note the importance of developing healthy neighborhoods to nurture healthy families and well-behaved children (Loe et al. 2011; Whipple, Evans, Barry, & Maxwell, 2010). The exposure to criminal activity, illegal substances, or alcohol abuse erodes the protective covering of the young and exposes them to risks that influence their social growth and moral development. Historically, community demographic variables have been accurate predictors of behavior outcomes and more specifically, school and family experiences (Ingoldsby et al. 2006). Likewise, multiple moderating factors play a part in the outcome of children's behaviors, and community characteristics symbolizes their effect on children's social behavior. Following is a brief discussion on various school-based interventions, and a more expanded discussion on parenting models that address the ecological conditions of children's socio-behavioral development.

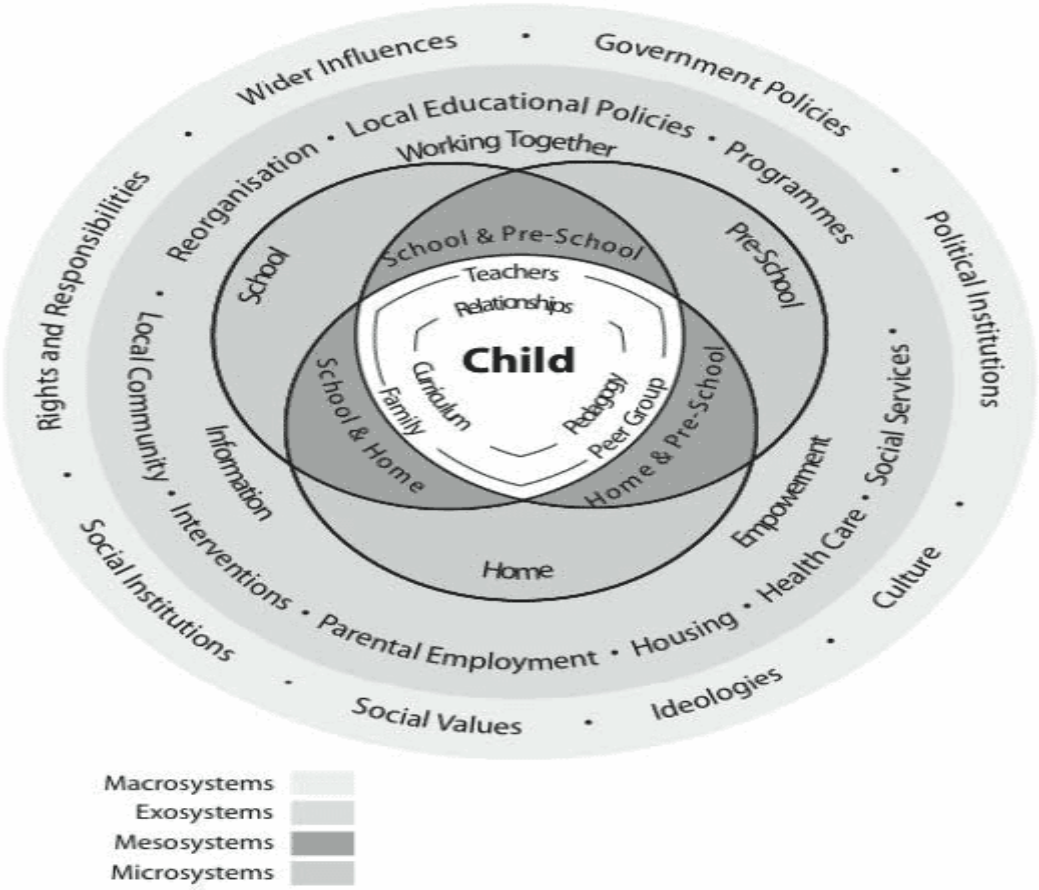


Figure 2.3 Multi-Systems of a Child (Reprinted from mydevtheory.blogspot.com)

School-based Models. Over the years a growing number of school-based interventions have emerged that target children with challenging behaviors. One such program which exemplifies a comprehensive approach is the Early Risers program (Dishion et al., 2008). The program consists of four major objectives aiming at improving child behavior and enhancing family functioning skills. The intervention is applied over a period of several months, allowing interventionists to accurately assess and treat the child and family simultaneously. Individualized plans allow more specific child academic and

behavioral concerns to be addressed. One unique component of the intervention caters toward the needs of parents and the challenges they face with the child's behavior. Participating parents meet in groups as a support system learning enhanced skills for improving their child's behaviors. In addition, interventionists provide home visits to further support parental efforts toward improved child conditions.

Parent Connectors is another school-based intervention that uses a parent–to-parent approach. This intervention aims at curbing behaviors that interrupt classroom learning environments. The key researchers, Krista Kutash and Albert Duchnowski of University of South Florida developed this program by promoting parent accountability practices that are delivered through weekly telephone calls to families of youth with ED (emotional disturbance). The aim of the intervention is to increase the engagement of parents within their child's education environment while trying to improve the academic and emotional functioning of the child (Kutash, Duchnowski, Green, & Ferron, 2011).

Parenting Interventions Models. There is agreement among social researchers on the importance of intervening early in the lives of maladjusted children through effective parenting models (Kazdin & Crowley, 1997). As mentioned earlier, poorly adjusted childhood behaviors are often associated with inadequate parenting and mismatched social systems (Middleton, Scott, & Renk, 2009; Tervo, 2010; Wu, Messner, & Roberts, 2010). In addition, related research suggests negative behaviors (e.g. hitting, disobeying rules, bullying) stem from

deficient and severely dysfunctional family dynamics (Bada et al. 2011; Connell et al. 2008). These findings highlight the impact of inadequate caregiving on children, propelling them toward undesirable behaviors such as conduct disorders, poor social skills and conflicting relationships with teachers (Neece & Baker, 2008; Prinz & Miller, 1994).

In contrast, family studies emphasize the importance of effective parenting and having well matched ecological systems implemented early in the lives of difficult children (Lundahl, Tollefson, Risser, & Lovejoy, 2008; Maag & Katsiyannis, 2010). More specifically, a review of the social-behavioral literature suggests a strong link between well-adjusted youth and strong self-efficacy parenting (Bagner & Eyberg, 2003; Brotman et al. 2011; Dishion et al. 2008; Gardner et al., 2009; Hoagwood et al. 2007; Kutash, Duchnowski, Green, & Ferron, 2011; Stormshak & Dishion, 2009). For this reason, effective and efficient parent trainings have become an important component for countering learned negative socio-behavior patterns that emerge from children's untreated adverse conditions (Brotman et al. 2011; Finn, 1998; Nock & Ferriter, 2005).

As of late, a number of studies have investigated the impact of interventions on parent behavior (Kutash, et.al, 2011; Lundahl, et.al, 2008; Maag & Katsiyannis, 2010). These studies examine parenting changes that occurred through structured trainings and how changes were sustained. For example, Brief Strategic Family Therapy (BSFT) is an intervention aimed at improving behaviors of children, while simultaneously attempting to improve family

functioning, including effective parental leadership, positive parenting, and parental involvement (Gardner et al. 2009). Notably, families that have participated in BSFT groups showed significant improvement in functioning, with long-term results (Carr, 2009). Of particular interest is an experimental study done by Frances Gardner on a large sample of families using the BSFT model (Gardner et al. 2009). The results revealed impressive outcomes on family functioning and child behavior, with specific impacts occurring on participating parent behaviors (Carr, 2009). Past analyses of BSFT have shown even better results if two parents and the targeted child received the intervention together.

Similarly, Tamera Wiggins suggests there are strong correlations between effective multi-component programs and children's behavior particularly at-home (Wiggins, Sofronoff, & Sanders, 2009). Her study on the Triple P (Positive Parenting Program) supported the positive effects that a comprehensive, multifaceted, and developmentally based curricula can have on families, teachers, and children who have behavioral attributes that put them at risk (Jones et al., 2008). The Triple P program is based on the social learning model which emphasizes the importance of families and teachers as social agents for children.

Similar to Triple P's efforts to improve child behavior conditions outside the classroom and within the family environment is the Incredible Years program. Program developer Webster-Stratton (2008) developed this comprehensive, multi-faceted, and developmentally based curriculum for parents, teachers and children. The program was designed to promote emotional and social

competence, to prevent, reduce, and treat behavior and emotional problems in young children. This intervention looks to increase positive parent responses such as praise and reduced use of criticism and negative commands. Other efforts of the program aim to promote parental self-confidence and reduce levels of depressions parents may be experiencing. Participating families learn healthy communication and problems-solving skills working with trained family interventionist. These and many other comprehensive parent interventions have proven to be vitally important when addressing the need for parental improvement.

Requisites for fidelity, socially valid, and efficacious studies. The development of newly innovative behavioral models requires the rigor of assessing the suitability and effectiveness with consumers. Often the unaccounted complications to implement an intervention moderate the intended outcomes of the intervention. Effective implementation steps are often derived from proper testing measures and an appropriate adjusting of intervention procedures. Frey, Sabatino, and Alvarez (2013) suggest that interventionists utilize consultation approach to ensure high levels of fidelity and acceptable social validity procedures. The consultation approach is even more crucial when introducing specialized services into settings where protocols demand high standards. The Joint Commission Journal on Quality and Patient offers a robust list of standards that promote high efficacy and social validity levels (Feldstein & Glasgow, 2008). Their developed prism includes a list of 39 categorized items for

guidance in implementation and testing procedures for socially valid interventions. This list includes a number of items such as : usability and adaptability, ability to observe results, patient centeredness, feedback of results, and addressed patient barriers.

In addition, Frey and the Joint Commission on Quality and Patient highlight relevant procedures around social validity studies, suggesting a careful consideration of how recipients of the interventions are experiencing the implementation processes. A thorough assessment of recipients' experiences offers valuable information for constructing efficient models, and modifying components of the intervention appropriately.

Conclusion. Children's maladjusted behaviors stem from multiple sources of influence, particularly social learning, and ecological influences. More so, inadequate and outdated interventions perpetuate the ailment of these children caught in a mire of poor family conditions and undesirable community environments. What may be warranted are proven contemporary interventions that promote and sustain positive parenting practices and good childhood behaviors. One such promising intervention is First Steps (FS). With FS, solutions to children's challenging behaviors are addressed on two fronts, the classroom and the family. Replicated studies of this intervention validate its effectiveness on children's behavior and its potential as a powerful parent training intervention (Beard & Sugai, 2004; Walker, Severson, Feil, Stiller, & Golly, 1998).

First Steps' fidelity, social validity, and efficacy attributes are discussed in the following chapter.

CHAPTER 3

DESCRIPTION, ADAPTATIONS AND EVALUATIONS OF FIRST STEP (TFS)

This chapter reviews the development of the First Step to Success (FS) early intervention program and research studies validating its effectiveness. In addition, recently developed adaptations of the FS intervention designed to expand the range of the intervention to address challenging behavior in preschoolers and students requiring tertiary-level support is described. This chapter concludes with a detailed description and preliminary evaluation results of the Tertiary First Step adaptation, as well as implications for future research.

Modular Components. A model depicting a timeline and coordinated steps provides an overview of the First Step procedures (see Figure 3.1). The intervention is implemented through three modules: universal screening, school, and home. The three phases of the FS intervention include a screening / early detection phase, a school intervention phase, and a homeBase parent training phase. The intervention requires approximately three months for full implementation.

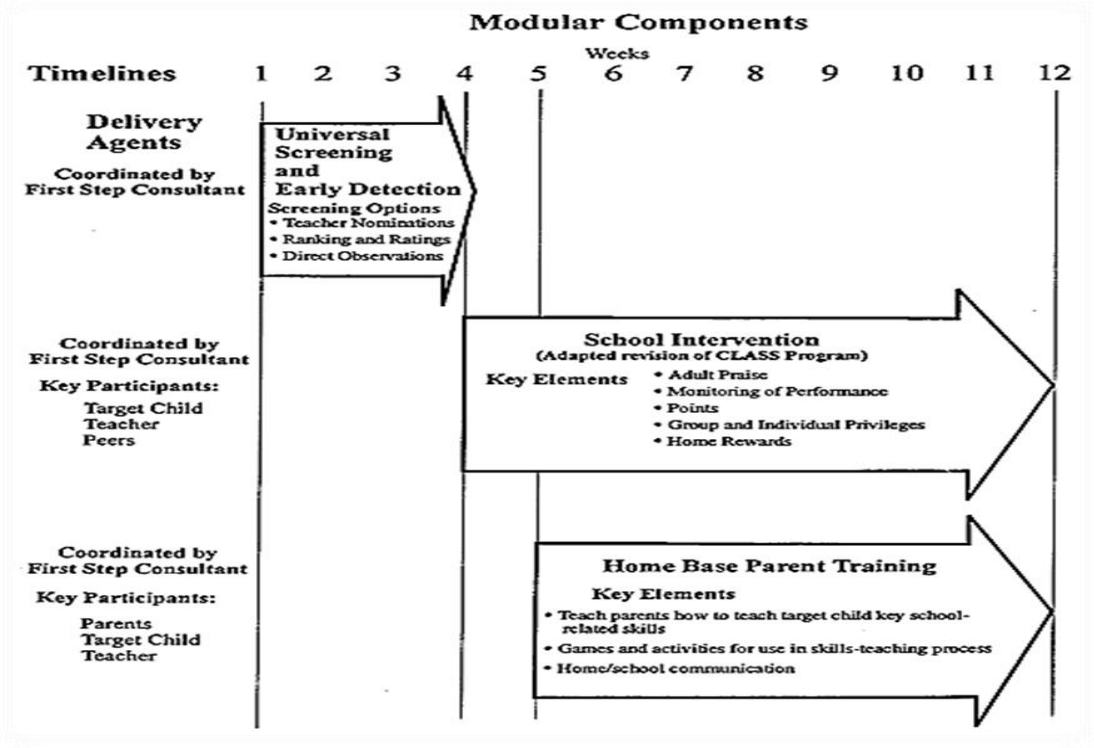


Figure 3.1 Modular Components of First Step. Reprinted from Walker, Severson, Feil, Stiller, & Golly (1998).

Universal Screening. The Systematic Screening for Behavior Disorders (SSBD) is used to identify children who would benefit from the FS intervention. The screening of children involves a process consisting of three gates. First, teachers select five children who exhibit challenging behavior, for example, negative internalizing and externalizing behaviors, such as sadness and afraid, and pushing and running, respectively. The teachers then rank-order the children from most to least severe. At the second gate, participating teachers assess the children's behavior using an adaptive behavior scale, maladaptive behavior scale, and critical events index. At the final gate, researchers complete an observation of the children's academic engagement levels in the classroom.

School Intervention (CLASS). The second modular component includes the implementation of a school intervention program called Contingencies for Learning Academic and Social Skills, or CLASS (Walker et al. 1998). Additionally, CLASS is implemented initially by a behavioral coach—typically a school counselor, social worker, psychologist or behavioral specialists—who works directly with the classroom teacher, targeted child, and parent.

CLASS is divided into three successive phases: consultant, teacher, and maintenance. During the consultant phase, coaches (a) explain the program to teachers and parents; (b) gather cooperation and consent from participating teachers, parents and children, and (c) activate operation of the "green card game." First, the coach teaches the child that the card serves as a sign that the child is either following (green) or not following directions (red). The coach flips the card to red only if the child goes off task. If the child keeps the card on green for approximately 80% of the time the game is played, he or she earns a reward for the entire class as well as reinforcement at home, which the parent provides. At the beginning of the intervention, children play the game for only 20 minutes, and the length of time increases gradually thereafter until completion of the program. Around day five, the teacher gradually assumes responsibility for playing the game, which signals the start of the teacher phase. During the teacher phase, which lasts for 15 days, the duration of the game continues to increase, and reinforcements are faded. Consequently, the child must meet the 80% criteria for multiple days to earn class and home rewards. During

maintenance, the final phase of CLASS, which lasts 20–30 days, teachers and parents replace rewards with praise and expressions of approval.

Home Intervention Parent Training (homeBase). FS is designed to support parents and guardians in developing parental competencies and skills that promote the child's performance in and adjustment to school. The homeBase component consists of a series of six lessons with instructional guidelines, and parent-child games and activities for teaching the skills directly. The target skills that parents are asked to teach their children are (a) communicating and sharing in school, (b) cooperating, (c) setting limits, (d) solving problems, (e) making friends, and (f) developing confidence. For implementation, the intervention requires home visits that last approximately one hour each (see Appendix A). These homeBase steps begin after the target child has completed day 10 of the CLASS program. A consultant visits the child's home weekly and conducts the homeBase lessons in those settings. Following each session, the consultant leaves materials with the parent who is encouraged to practice each skill with the target child. In addition, parents are encouraged to play with their children 10 to 15 minutes daily and to focus on practicing the homeBase skills.

An important shared goal of FS and the homeBase component is to build a strong, positive link between home and school environments. Specifically, homeBase is designed to strengthen parenting skills by developing child competence in key performance areas that are related to success in school (Walker, Golly, McLane, & Kimmich, 2005). Along with teachers, parents and

guardians are enlisted as partners in helping the child get the best possible start in his or her school career. The ultimate goal of homeBase training is to get educators and parents/guardians on the same side when helping vulnerable children experience success early in their school careers. If achieved, this outcome can be a key protective factor for diverting children from antisocial paths in their subsequent school career.

Adaptations of First Step(FS)

Three primary adaptations have expanded the FS intervention. These adaptations have resulted in additional manualized procedures that include FS variations for (a) use in preschool settings (Preschool FS); (b) improving teacher classroom management skills (FS Classroom Check-up (CCU)); and (c) children who require tertiary level support, for instance, those with more severe behaviors (TFS) (For more detail, see http://www.firststeptosuccess.org/resources.html). The following section describes these adaptations as well as the preliminary evidence to support their success in expanding the range of the FS intervention to more diverse populations.

Preschool First Step. Since 2000, FS has been adapted for use with preschool-age children. According to Frey et al. (2013), the following guidelines from the Center on Evidence Based Practices were used to guide the practice of FS in preschool settings:

- Differences in the (physical-social ecological) nature and dynamics of preschool and primary grade settings

- Skill level differentials favoring students in primary grades
- Developmental differences in maturation between preschoolers and students in primary grades

These modifications created moderate changes in implementation methods that accommodated the developmental differences in preschool aged children, as well as the structural and ecological differences between preschool and elementary school settings.

A pilot study conducted by Frey et al. (2013) examined the feasibility, social validity, and the effects of the intervention on problematic behaviors and social skills of preschoolers. Feasibility and social validity outcomes showed preliminary support for the intervention. Additionally, nine of twelve participating children showed improvement in social skills. This group of children also showed a statistically significant reduction in maladaptive and problematic behaviors in both home and classroom settings.

A separate longitudinal study of schools located in Oregon, Kentucky, and Indiana utilized the preschool version of FS and produced promising preliminary outcomes (Feil et al., 2013). This study was conducted in 20 Oregon and 35 Kentucky and Indiana classrooms. The participants consisted of 128 preschool children whom the researchers assigned randomly to either First Step to Success or the usual-care control group. Results indicated that the FS group showed statistically significant favorable outcomes on several measures of social skill and problem behavior across home and school settings.

First Step Classroom Check-up (CCU). First Step CCU was guided by the work of Reinke, Lewis-Palmer, and Merrell's (2008) Classroom Check-up model. The Motivational Interviewing Navigation Guide (MING) (Frey et al., 2013; Lee et al., in press) guided the development of the First Step CCU. The MING is a process for increasing intrinsic motivation for adopting and implementing evidence based practices with integrity in school settings. In the FS CCU, the MING process is infused into the intervention procedures in order to increase teacher motivation and to change their behaviors to be consistent with one or more of the five universal principles of positive behavioral support that are central to the First Step intervention (Reinke et al., 2008). These universal principles are:

1. Establish clear expectations.
2. Directly teach the expectations.
3. Reinforce the display of expectations.
4. Minimize attention for minor inappropriate behaviors.
5. Establish clear consequences for unacceptable behavior.

First Step CCU is typically completed in 2–3 brief interviews with the classroom teacher. Preliminary examination of this FS adaptation is promising. Specifically, in a small pilot study, interventionists were able to implement the procedures with acceptable fidelity ratings. Additionally, the intervention received high satisfaction scores, and it was associated with increases in teachers' reinforcement of expectations, reductions in attention for inappropriate behavior, and improvements in relationships between students and teachers. Specifically,

there was a reduction in reprimands from baseline M (SD) = 29.50(26.6) to post M (SD) = 19(11.6) and an increase in reinforcement from baseline M (SD) = 36.3(24.3) to post M (SD) = 62.5(23.9), each of these were statistically significant ($p < .05$) (Lee et al. in press).

Tertiary First Step (TFS). Developed and evaluated via an Institute of Education Sciences development grant awarded to Andy Frey and Hill Walker in spring 2009, TFS includes a revised home component called Tertiary homeBase, as well as troubleshooting procedures for implementing the CLASS module with children who present with more severe challenging behavior. Thus, Tertiary FS consists of the original screening module, a modified version of the school component (i.e., CLASS), and a new home module (i.e. Tertiary homeBase). Tertiary homeBase constitutes the central focus of this dissertation research. The intervention was designed to be more effective in engaging and retaining parent participation in the home component of the FS intervention and to improve parenting practices that promote success in school. Much like the First Step CCU, the Motivational Interviewing Network Guide informs the development of Tertiary homeBase. The Motivational Interviewing Network Guide (MING) process is incorporated into the intervention procedures for the purposes of increasing parental motivation and changing parents' behaviors to be consistent with one or more of the five universal principles of positive behavioral support that are central to the First Step intervention. Furthermore, Tertiary homeBase is a manualized intervention. The manual provides resources and

explicit instructions for coaches and program administrators. (see Appendix B or www.firstseptosuccess.org/resources.html).

Typically, Tertiary homeBase component requires two to five sessions that last 60 minutes each (i.e., home visits). Implementing the intervention requires coaches to be proficient in motivational interviewing skills. Additionally, the coach must be skilled in applying behaviorally based interventions with teachers and parents of students with challenging behaviors. Using two cohort groups Frey et al., (2013) recruited teachers across a period of two years. By using the SSBD (Systematic Screening for Behavioral Disorders) screening procedures plus additional criteria to ensure behavioral impairment was also present in the home setting, researchers recruited 33 high-risk students from schools located in Kentucky and Indiana. An evaluation of this intervention constitutes the content of this dissertation; outcomes will be covered in subsequent chapters.

Evaluations of First Step to Success

Over the years, a number of studies have endorsed the effectiveness of First Step to Success, with more than 90% of these studies reporting moderate to large effect sizes (see Table 2.1). The first of these studies summarized below is Walker and colleagues' seminal study of FS with school age children within classroom settings. Spanning over a period of two decades, other studies have followed and are also summarized below according to type of research design (single subject, quasi-experimental, and experimental).

The initial study by Walker et al. (1998) provided insightful findings and groundwork for subsequent research. This randomized, experimental, wait-list/control-group study of 46 kindergartners remains one of only a few experimental studies on FS with extended follow-up periods to determine long-term effects. The study aimed to determine the effectiveness of the intervention on children with antisocial behaviors as well as the social validity of the program with parents and teachers. The authors looked at the effect of the program on children's adaptable behaviors. The authors also considered the impact of the intervention on undesirable behaviors in the classroom, including aggressive, antisocial, and withdrawn behaviors. An analysis of covariance was conducted wherein baseline measures served as covariates. In favor of the FS group, four of the five dependent/outcome measures were found to be statistically significant. Cohen's d (1988) was used to evaluate the intervention across five dependent measures. Cohen d is interpreted as .2 = small, .5 = medium, .8 = large. Effect sizes averaged .86 and ranged from .26 to 1.17 for improved social skills. Eighty percent of the initial pre- and post- gains were maintained and sustained moderate to high effect sizes at two-year follow up stages. Other outcome variables showed significant statistics that verified improved behavioral conditions over pre and post periods as well across the school year, classrooms, teachers, and peer groups. Walker et al. (1998) concluded that the effects of the intervention were robust. Lastly, the study evaluated the social validity of the

program. Overall, parents and guardians were satisfied, and they accepted FS as viable and useful for reaching its stated goals.

This initial success of integrating FS within classrooms and family settings introduced other replicated studies in various educational settings. Additionally, the promising results led to more robust studies that addressed the behavioral concerns of children who were in their early school years. The following sections describe these studies at length.

Year and Author(s)	Study Design	Title	Study Outcomes
1998 (Walker, Severson, Feil, Stiller, & Golly, 1998)	Experimental	*First step to success: Intervening at the point of school entry to prevent antisocial behavior.*	*Significantly improved condition of participating children against control group*
1998 (A. M. Golly, Stiller, & Walker, 1998) 1 of 2 studies	Experimental Efficacy	*First step to success: Replication and social validation of an early intervention program.*	*Significantly improved condition of participating children against control group*
2000 (A. Golly, Sprague, Walker, Beard, & Gorham, 2000)	Single-subject	*The First Step to Success Program: An Analysis of Outcomes with Identical Twins Across Multiple Baselines*	*Improved behavioral condition of subjects*
2002 (Overton, McKenzie, King, & Osborne, 2002)	Single-subject	*Replication of the First Step to Success Model: A Multiple-Case Study of Implementation Effectiveness*	*Improved behavioral condition of subjects*
2004 (Beard & Sugai, 2004)	Single-subject	*First Step to Success: An Early Intervention for Elementary Children At*	*Improved behavioral condition of subjects*

		Risk for Antisocial Behavior	
2005 Diken and Rutherford	Single-subject	*First Step to Success Early Intervention Program: A Study of Effectiveness with Native-American Children*	*Improved behavioral condition of subjects*
2005 Walker	Experimental	*The Oregon First Step to Success Replication Initiative: Statewide Results of an Evaluation of the Program's Impact*	*Significantly improved condition of participating children against control group*
2009 Nelson, Synhorst, Stage	Experimental-Efficacy	*The Child Outcomes of a Behavior Model*	*Socially valid intervention*
2009 Walker	Experimental	*A Randomized Controlled Trial of the First Step to Success Early Intervention: Demonstration of Program Efficacy Outcomes in a Diverse, Urban School District*	*Significantly improved condition of participating children against control group*
2009 (Sprague and Perkins)	Single-subject	*Direct and Collateral Effects of the First Step to Success Program*	*Improved behavioral condition of subjects*
2012 Sumi	Experimental	*Assessing the effectiveness of First Step to Success: are short-term results the first step to long-term behavioral improvements?*	*Significantly improved condition of participating children against control group*

Table 2.1 Developed literature of First Step

Single-Subject Designs. Aside from determining the durability of the intervention, Golly et al. (2000) intended also to rule out the impact of genetic

disposition on behavioral change. They recruited identical twins and used a single subject, reversal design with FS participants in order to detect participants' responses to the intervention. The study utilized the Early Screening Project (ESP) screening tool to target students who met the criteria, and measured their academic progress through academic engagement time (AET), an adaptation of Systematic Screening for Behavior Disorders (SSBD) for preschool children. The screening procedure consisted of three gates. At gate one, children were nominated, and teachers ranked ordered children based on internal and external behaviors. These behaviors refer to the internal emotional responses such as sadness and fear, and external observed responses such as pushing and running. At gate two, teachers completed brief rating scales for each nominated child. Gate three included observing the highest rated children during structured and unstructured activities. The intervention produced robust effects on academic engagement time and reduced maladaptive behaviors in one of the two participating twin children. Results showed an increase in academic engagement time by child one with an average of 74% during the baseline phase to 99% during the intervention phase. Follow-up results were not reported. Golly et al. (2000) reported booster efforts were used post-intervention stages to reduce the decline in behavioral improvements, which may suggest that the children's behavior typically weakened after the intervention was implemented in normal circumstances.

In similar fashion, Beard and Sugai (2004) conducted a single subject design study with six students from two elementary schools with high percentages of children from low socioeconomic status. The researchers implemented a multi-baseline design and collected academic engagement time (AET) observations to determine the effect of intervention. Additionally, the researchers examined the impact of the FS intervention on classroom conditions, and captured the experiences of participating families. All six participating children showed decreases in problematic behaviors and increases in AET levels. Most impressive was the durability of gains for four of six children who maintained progress after withdrawal periods of the intervention. Although the authors stated an unclear effect related to the homeBase component, the study concluded that the value of this component was pertinent to the worthiness of the program.

Sprague and Perkins (2009) also implemented a multi-baseline design across participants (n=4) with extended inquiries into the effect of the intervention on peers and teachers. The researchers used procedures suggested by program developers to establish coach, intervention, and maintenance phases for each participant. This study used problematic behavior, academic engagement, teacher-child interaction, and peer social instrumentations to measure the effect of the intervention. Moreover, the authors collected implementation integrity data and evaluated the social validity of the intervention. Notably, the authors observed an average decrease of 1.68 points per student from baseline to post-

intervention point for problematic behaviors, and an average increase of 1.13 points during follow-up periods for academic engagement time. The researchers employed direct observation to measure problematic behavior and academically engaged time. Each day, an observer recorded the frequency of time during which the child was engaged. Plus, he or she recorded the number of positive and negative student-teacher interactions. In particular, the observer tabulated the total number of problematic behaviors displayed during three-minute observation segments. Moreover, the academic engagement time improved from 64% to 90%, while teacher-student interaction average points improved from 3.15 to 8.35, and negative teacher-student interaction ratings decreased from 7.65 to 3.38. Overall, teachers rated their perceptions of, and satisfaction with the study as positive. Unfortunately, even though the home component of the intervention was employed as usual, Sprague and Perkins (2009) excluded any information on the home component, its implementation challenges and intended outcomes.

Comparable to the study by Sprague and Perkins (2009), Diken and Rutherford (2005) conducted a smaller study of four Native American children using a single subject, multi-baseline design. With the exception of one child who lived in severe high-risk conditions, these researchers reported similar positive effects on the social behavior of children. They also noted that negative behaviors decreased during the intervention stage.

Furthermore, Diken and Rutherford (2009) set out to determine the impact of the intervention on the problematic behaviors of individual children as well as the behaviors of teachers and entire classrooms. They used social play, a behavioral checklist, teacher rating scales, and interviews to measure social behavior, classroom conduct and peer relationships. Reported results include the following: three out of four children showed significant improvements regarding problematic behavior; slight improvement in classroom-wide behavior; and high overall parent and teacher satisfaction with the program.

In another study conducted by Overton, McKenzie, King, and Osborne (2002), the researchers tracked 16 kindergarteners to determine the effect of the FS intervention on academic engagement time and child behavioral outcomes; they also assessed parent and teacher satisfaction and implementation fidelity. Of the 16 children completing the program, pre-intervention academic engagement time M (SD) = 70(9.3) significantly increased compared to post-intervention M(SD)= 93(16.5). All 14 parents of the 16 kindergarteners stated that the program had a positive influence on them as well as on their child. Of the parents, 81% completed 90% of the program, which was a relatively high outcome in comparison to other previous studies (Walker, 2012). Lastly, the authors sought to determine how well teachers could implement the intervention without continuous coaching from program administrators. Moreover, by using a systematic direct observation measurement and a functional assessment checklist for teachers and staff, the researchers investigated how student

behavior improved based upon the condition of minimal coaching. The results illustrated a high range of fidelity (zero–100%) for teachers while showing a causal effect on problematic behavior, which also showed high variability. Although the researchers were able to detect changed behavior by judging the level of the teacher's adherence to implementation methods, the data on caregivers' outcomes were absent.

Experimental Efficacy Designs. FS' experimental efficacy designs were conducted in controlled classroom environments. The implementation of the intervention in this type of design utilized trained coaches and trained teachers over the course of the experiment. In most cases, researchers used close observational methods and demanding implementation procedures to conduct their experiments in classrooms with coaches. Along with measurements that determined social validity and levels of satisfaction with the program, these studies utilized experimental groups, control groups, and randomization processes.

Furthermore, a major concern for FS developers has been the degree of implementation fidelity by program administrators. This has become a regular discussion point wherein replicators attempt to adhere to prescribed principles yet struggle with application procedures. For example, two studies conducted by Golly, Stiller, and Walker (1998) considered challenges that program administrators encountered during implementation stages. Both studies examined adherence measures and the level of social validity among teachers

and parents. In the first study, children participating in the program were rated by teachers on adaptive and maladaptive behaviors, academic engagement time, and aggression. The findings indicate teachers' rating of children post-intervention compared to the baseline increased in regards to adaptive behavior and academic engagement time and decreased for maladaptive behaviors and aggression. Each of these outcomes were statistically significant ($p < .05$).

In the second study conducted within the same year, Golly, Stiller, and Walker (1998) used a trainer's workshop and survey to examine the social validity of 141 teachers in three areas: consumer satisfaction, measure of teachers implementing program after training, and outcomes on implementers' acceptance of program features. Of the 74 teachers responding to the survey, 43 implemented the program, and results revealed a positive rating given for its effectiveness in teaching appropriate behavior, improved peer relations, and easy-to-manage teaching duties. Many of those respondents who did not implement the intervention stated that the cost of the program was too high, or there were too few students with severe behaviors in the classroom. Aside from these findings, they also cited the unfeasibility of using consultants as reason for not implementing the program. However, program developers were pleased with the behavioral outcomes that produced highly satisfied users. Lastly, these same respondents also stated their concern with the need for stronger and more lasting support systems.

In another study, Nelson, Hurley, Synhorst, Stage, and Buckley (2009) compared FS against two other types of school age programs, Behavior and Academic Support and Enhancement (BASE) and Multi-systemic Therapy (MST). They focused their study on low-SES (Social Economic Status) children, and used a linear growth model to determine the effect of the program on problematic behavior, social skills, and academic reading skills. The 407 study participants, consisting of kindergarteners through 3rd graders, were divided into two cohorts. The study was conducted in four segments spanning a year each. With the use of these three collaborative interventions, researchers were able to determine the universal effect of BASE on problematic behaviors. Nelson et al. (2009) noted that problematic behaviors and social skills were statistically significant ($p < 0.01$) when compared to control group outcomes. Furthermore, FS promoted gains in social skills and reduced problematic behaviors which were sustained over time. In contrast, gains in social skills and a reduction of behavioral problems were not statistically significant. Nelson et al. (2009) also noted no effect on academic performance. The researchers attributed these disappointing outcomes to low-fidelity implementation procedures and the challenges of families completing the intervention steps.

Experimental Effectiveness Designs. Walker et al. (2005) targeted 181 students who were in kindergarten through second grade while using a hybrid control group consisting of students nominated by teachers and combined scores of a control group from a previous FS project (Walker, Severson, Feil, Stiller, &

Golly, 1998). Much like in previous studies, the SSBD was used to screen participants. Outcome measures included academic performance, social skills, and problematic behavior collected from direct observation as well as guardian and teacher ratings. Effects sizes ranged from .84 to 1.31 for all four dependent variables. Overall, guardian and teacher satisfaction scores were positive.

More recently, Walker et al. (2009) conducted a study with 200 first-through-third-grade students, the first of its kind within a largely diverse urban school setting. The study looked at changes in academic performance, social behavior, and participant satisfaction. The study achieved relatively robust effects across three of four dependent variables (i.e., maladaptive behavior, adaptive behavior, and social skills), but results on follow up outcomes were disappointing. The academic measurement was responsive to the intervention with an effect size ranging from .13 to .66. Maladaptive behavior was determined to have an effect size ranging from .62 to .73. Adaptive behavior and social skills were determined to have an effect size ranging from .54 to .87. Furthermore, the intervention received satisfactory outcomes from teachers and parents. However, outcomes on the home component received very little attention in this study.

Lastly, Sumi et al. (2012) conducted an effectiveness trial with students from 24 experimental and 24 comparison schools in California and Oregon. In total, 286 children and parents participated. The study implemented strategies that promote high fidelity procedures while considering correlated behavioral

outcomes. Researchers examined the classroom component, the home component, fidelity implementation ratings, and parent and teacher qualitative evaluations. Using a hierarchal analysis, results paralleled previous outcome results of other FS experimental studies, although the effect sizes were less robust. Specifically, effect sizes across outcome measures ranged from .11 to .67. Additionally, parent satisfaction ratings (M=0.95, SD=0.11) and fidelity outcomes (M=4.21, SD=0.62) were high. The study provided narrative outcomes on the parent involvement component with a short description of its effect on child's behavior. However, the description was too brief to demonstrate its effect on classroom behavior.

From these described studies, there are two concluding points of interest. First, the established effectiveness of the FS program on children's behavior is positive. The intervention demonstrates its compatibility within various school settings, such as rural and urban. The robust impacts of the intervention on difficult behaviors were consistently found through replicated studies and with various challenging behaviors and behaviorally at risk children. Nonetheless, limitations were revealed during follow up phases. For example, Walker et al. (2005) replicated study in Albuquerque, New Mexico, the largest of its kind, resulted in moderate to large effect sizes on maladaptive behaviors and academic and social measurements. However, it reported a substantial decrease in outcome gains after six-month and one-year follow-ups. Not surprisingly, as in similarly designed studies, sustaining positive results was a challenge. These

outcomes resulted in developers suggesting the use of booster sessions (e.g., reintroducing children to the classroom component) in order to recover lost gains. Unfortunately, no data on the effectiveness of booster sessions has been published at this point. Secondly, outcomes attributable to the home component are difficult to determine. Although the home component was included in all of the studies as an important aspect of the intervention, little attention was given to the fidelity of implementation. Consequently, it was difficult to ascertain its relative contribution to the outcomes reported.

Conclusion

First Step has a proven record for intervening effectively and addressing the behaviors of children's in classroom settings. Specifically, the FS intervention has demonstrated its ability to improve social skills, decrease problematic behaviors, and increase academically engaged time of students in primary grades. These effects have been replicated across multiple research designs and have been implemented by research (i.e., efficacy) and school (i.e., effectiveness) personnel. In spite of the positive outcomes associated with FS, very little is known about the relative contribution of the home component.

Recently, three adaptations have expanded the range of the FS intervention and improved its ability to serve younger populations as well as those with more severe disorders. This dissertation research examines existing data in an attempt to determine the extent to which the Tertiary homeBase

module has been implemented with fidelity and social validity. Additionally, the author proposes to examine pre and post change in parental self-efficacy levels.

CHAPTER 4

METHODOLOGY

Tertiary First Step is a derivative version of the original First Step intervention with some modifications that includes a more extended homeBase component. This chapter describes the methodology used to evaluate the Tertiary homeBase module. This study uses secondary data from grant #R324A090237, described in the previous chapter. The goal of the study is to determine the extent to which the program is implemented with fidelity and if parents believe the goals of the intervention were important, the procedures acceptable, and the desired outcomes obtained. In addition, this study will evaluate any change of parental self-efficacy over time, which is a proximal outcome presumably affected by participation in the home component. The intervention was designed to be more effective in engaging and retaining parent participation in the home component of the FS intervention and to improve parenting practices that promote success in school. Thus, this component (homeBase) of the FS intervention attempts to affect the ecological systems of the home, which is a critical environmental element of children's lives. The following research questions will be addressed:

1. *To what extent was the Tertiary homeBase module delivered with fidelity.*
2. *To what extent do parents believe that the Tertiary homeBase module is socially valid?*
3. *What extent did parents' self-efficacy increase after participating in the intervention?*

This chapter describes the design of the research, the setting, and sample population utilized for this study. A description of each instrument's psychometric properties is provided, in addition to the procedures used to evaluate the intervention. An explanation of each research question is presented and a summary of the intervention procedures follows. The chapter concludes with a brief description of data management and analysis.

Rationale for Assessing Fidelity and Social Validity. The research questions in this study address fidelity and social validity. An overall goal of the study is to determine social validity levels of the intervention with parents of children with severe behavior challenges. This also includes levels of satisfaction and usability of the program for both the parent and coach.

Furthermore, varying institutional bodies of research stress the importance of fidelity measures and socially valid outcomes. As an example, SAMHSA's (Substance Abuse Mental Health Service Administration) Clearinghouse proposes standards for treatment fidelity and social validity goals. SAMHSA's What Works Clearinghouse uses a criteria-based procedure when measuring

acceptability ratings of programs. This section expands on three of the criteria-based procedures for this study.

First, the Clearinghouse states the importance of interventions having goals that are meaningful and important to the consumer. Secondly, there is emphasis on programs having acceptable procedures practiced with participants. A final standard emphasizes the importance of desired outcomes be obtained by program implementers and program participants. The newly developed TFS is rated against these three stated principles of the Clearinghouse.

A large part of this study is to determine at what level were fidelity levels reached, and how socially valid is the intervention. The fidelity outcome levels for this study may suggest the difficulty in implementing such a program within family settings. Furthermore, a measure of parents' acceptance and approval of the procedures adds to the knowledge of how socially valid is the program for families. In other words, do parents see the intervention as a program that fits well within their family context? These fidelity and social validity issues guide the questions asked and legitimizes the design of this study.

Design

The researcher used existing data from a quasi-experimental study to evaluate the Tertiary homeBase component of TFS. A single group pre- and post-test design was employed with children who were identified with tertiary-level behavior problems.

Setting

The study was implemented in two school districts: Jefferson County Public Schools (JCPS) of Louisville, Kentucky and Greater Clark County Schools (GCCS) of Clarksville, Indiana. These districts contain 38% and 16% minority students respectively. In addition, these two sites are public school districts located within urban settings. Although Tertiary homeBase is delivered in the caregivers' home, occasional meetings occurred within the school.

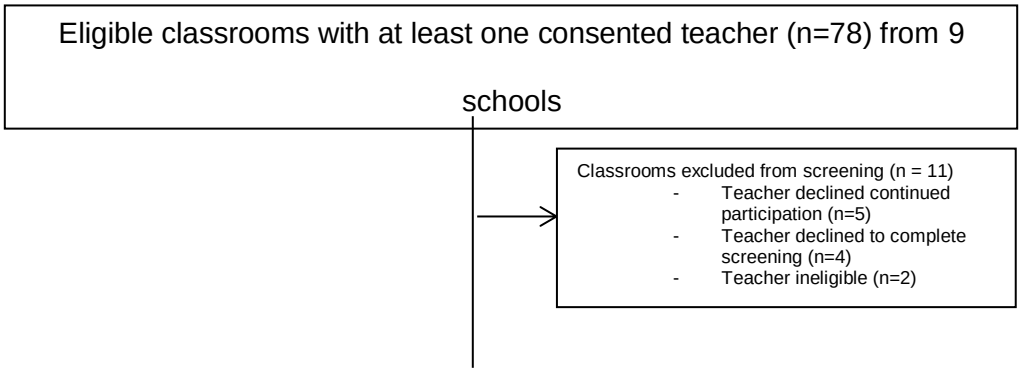
Sampling Procedure

Participants of the project were recruited from seven schools within JCPS and two schools from GCCS. The schools serve children enrolled in kindergarten through sixth grades. One particular school, Waller Environmental School, houses four self-contained primary level classrooms for children identified as emotionally and behaviorally disturbed (EBD). Thirty-three parents of eligible children agreed to participate in the study (three of the 33 parents withdrew from study) (see Table 4.1). Of these thirty-three individual parents, one child from each participating parent was targeted for the intervention. Three trained coaches were assigned to each of the parent-child dyads. These coaches conducted the homeBase component along with the classroom component of the intervention.

Participant's Title	#	Role in TFSS	Stage of Involvement
Parents	33	Participated with coach in assisting child	Throughout homeBase
Targeted Child	33	Participated in classroom and HomeBase	Throughout classroom and homeBase
Coaches	3	Participated in classroom and HomeBase	During classroom and homeBase

Table 4.1 Participant's Role and Stage of Involvement.

Initially, JCPS' and GCCS' central administration office were contacted to help identify specific schools that may have had some interest in participating in the study. Then, the principal of each of these schools was provided with an overview of the project. Next, a meeting was held with interested principals and a list of kindergarten through third grade teachers was secured. This was followed by a presentation of the project to potentially interested teachers. Those teachers that were interested were then recruited and provided with a written consent-to-participate agreement. A total of 78 classroom teachers from 9 different schools consented to participate (see Figure 4.1).



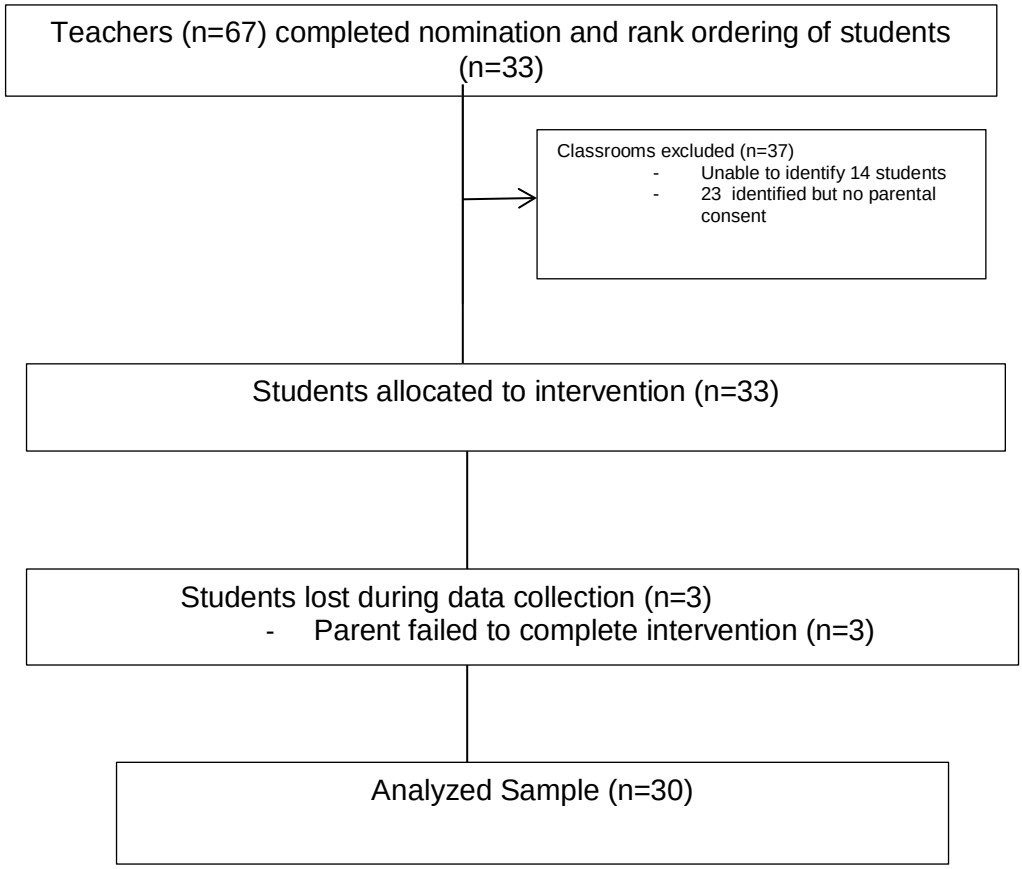


Figure 4.1 Schematic overview of participation and sample definition through screening, consent randomization, and data collection intervals.

After children attended a minimum of twenty schools days, research staff began the screening process to identify eligible students in classrooms of participating teachers. As can be seen in Figure 4.6, there were 78 classrooms from 10 different schools identified as eligible for participation. From those eligible classrooms, 11 were excluded from participation due to the teacher declining to continue participation (n=5), complete screening (n=4), or ineligibility (n=2). Eligible teachers (n=67) rank-ordered their nominated children (n=33). A total of

37 classrooms were eliminated from the study due to teachers being unable to identify qualifying students (n=14), and not receiving parental consent for identified students (n=23). Thirty-three parent-student dyads were included in the final recruited sample. However three of these parents withdrew prior to the start of the next phase of the study.

During screening, teachers completed gates one and two of the Systematic Screening for Behavioral Disorders (SSBD), which was previously described in detail in Chapter Two. During gate one, teachers identified the five students in their class who exhibited the most severe externalizing behaviors. Next, children were rank ordered from most to least severe in regards to their behavior. During gate two, teachers completed the critical events index, maladaptive behavior scale, and the adaptive behavior scale for each of the students identified in gate one. Children who were rated as having five or more critical events, 30 or fewer adaptive attributes, and 35 or more maladaptive behaviors remained eligible for participation. If there were more than one eligible child in the class, the child was rank ordered by severity based on the maladaptive behavior scale. Parents of the highest ranking child (most severe behavior) from each class were contacted by phone, provided with a brief description of the study, and asked if they would be interested in completing the final screening procedure. If parents expressed interest, the externalizing behavior subscale of the Child Behavior Checklist (CBCL) (Achenbach et al. 2008) was completed during the call. If the targeted child did not exceed the

CBCL borderline significant threshold (T score = 60 or greater) or the parent declined to participate, the second phase of the screening process started over with the parents of the child who was ranked second in the class. If the student exceeded the borderline threshold and the parent agreed to participate, a home visit was scheduled. During the brief home visit with the parent(s), the details of the study and the written consent form were explained, and the consent to participate in the study was obtained via the signed consent form. This process was repeated until the researchers identified an eligible child in each class. If a class did not have an eligible child whose parent agreed to participate, the teacher did not participate in the intervention phase.

Measures

Coaches utilized four instruments during three separate phases of the intervention. The phases and instruments are depicted in Figure 4.2. Specifically, the *Parent Ladder,* a measure of parental efficacy was administered at pre-intervention phase and at post-intervention phase. The Motivational Interviewing Treatment Integrity (*MITI)* and the *Coaches' Checklist* were utilized during intervention phase of the study to measure fidelity levels. Additionally, a *Parent Satisfaction Survey* was administered post-intervention phase of the study. Each of these instruments were categorized based upon process measures or outcome measures. Particularly, the *MITI, Coaches' Checklist, and Parent Satisfaction Survey* provided an analysis of process, whereas the *Parent*

Ladder provided an analysis of proximal outcomes. Details of each measure are described below.

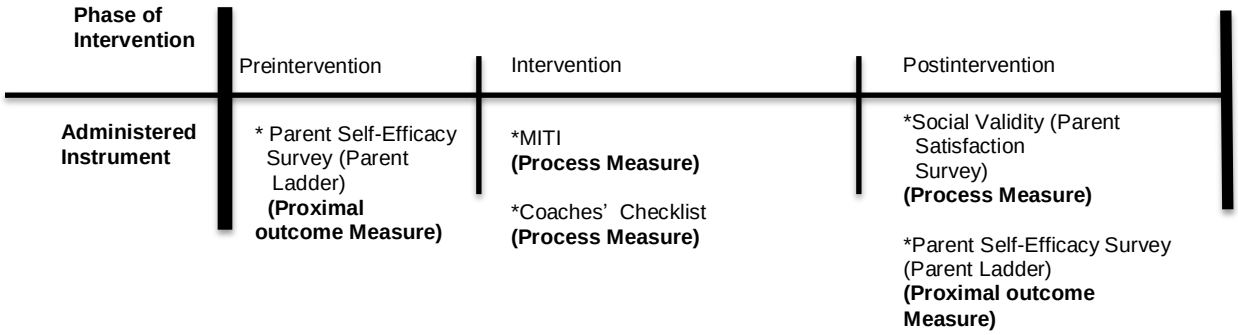


Figure 4.2 Administration Period of Instruments.

Process Measures. Two process measures were administered to determine if the intervention was implemented with fidelity, and one process measure was administered to assess social validity. The *Coaches' Checklist* is a self-administered survey in which coaches of assigned families assessed parent engagement. In addition, the *MITI* rated coaches' compliance with the intervention protocol; specifically, it measured their Motivational Interviewing skills during parent meetings. As a final process measurement, the *Parent Satisfaction Survey* was administered to assess social validity, or the parents' perceptions with regard to the appropriateness of the intervention goals, acceptability of the procedures, and perception of the interventions' effectiveness. Each measure is described below.

Coach Checklist (fidelity). The coach checklist has five items that measure level of parent engagement with the intervention (see Appendix C).

There are five steps included in this process. One, coaches engage parents in a values discovery process. This entails the use of assisting parents in discovering relevant parenting values. Two, an assessment of parents' current parenting practices via recording an in-vivo parent-child interaction event. Three, provide feedback with parent based upon the assessment results of the interaction event. Four, offer extended consultation education and support as a result of feedback provided in the previous step. Five, provide a closure meeting with parent. For this analysis, parents completing the first three steps of homeBase were classified as completers. At this point, no known reliability ratings have been established for this instrument.

Motivational Interviewing Treatment Integrity Code (MITI) (fidelity). The MITI is a coding system that measures coaches' skill in implementing Motivational Interviewing techniques (see Appendix D). The measure includes five global items, representing the Motivational Interviewing Spirit (i.e., collaboration, control, autonomy and choice, understand and reflect, evocation). Additionally, coaches' utterances were coded using behavior counts in the following categories: open-close ended questions, simple reflections, and complex reflections. The MITI has adequate psychometric properties (Madson & Campbell, 2006) with Moyers et al. (2005) reporting interclass correlations (ICC) to estimate the inter-rater reliability of the global ratings around .51. The interclass correlations (ICC) for coaches' interview questions ranged from .57 to .96. For this analysis, a random sample (10 out of 30 audio recordings) of the

interventionist working with parents was coded by two professionally trained coders at the Clinical Training Institute (a third party coding company). A starting point was chosen at random, and each tape was coded for 20 minutes. The coach's score across the global items was averaged in order to create a global MI proficiency rating, and behavior counts were scored to determine proficiency and competency rankings, which serves as a measure of compliance. Beginning competency thresholds are described in the manual and are summarized in Table 4.2.

Scoring		Beginning Threshold	Competency Threshold
Global Spirit Rating	Evocation + Collaboration + Autonomy Support / 3	Average of 3.5	Average of 4
Reflection-to-Question	Total Reflections/Open Questions + Closed Questions	1	2
Percent Open Questions	Open Questions / Open Questions + Closed Questions	50%	70%
Percent Complex Reflections	Complex Reflections / Total Reflections	40%	50%

Table 4.2 Scoring Procedures and Proficiency and Competency Thresholds.

Parent Satisfaction Survey (Social Validity). The parent satisfaction survey includes 12 items designed to assess social validity, or the extent to which parents believed the goals of the intervention were important, the procedures acceptable, and the desired outcomes obtained (see Appendix E, items 1-12). The Satisfaction survey includes the standard twelve items with a reliability rating of $\alpha = .92$. The researchers calculated the mean of the total score to determine

the overall level of parents' satisfaction with the intervention. An item and composite summary was completed and analyzed, using descriptive statistics.

Outcome Measure. To determine any change in parent's self-efficacy, the parents rated themselves in the area of how they perceived their own parenting. One instrument was used to measure this outcome.

Parent Ladder (efficacy) (Katzev, 2000). This instrument was administered during pre-intervention and a second time during post-intervention (see Appendix F). This scale has six items that are measured on a scale of 0 to 6, with 0 being "strongly disagree" and 6 being "strongly agree." A t-test was used to analyze parents' changes in self-efficacy levels from pre- to post-intervention. The *Parent Ladder* has a reported internal consistency score of .84. For the within-subject analysis, a partial correlation (point-biserial r) will be used as a measure of effect size (Rosnow & Rosenthal, 2008). Effect sizes of .14, .36, and .51 are considered small, medium, and large, respectively, for the partial r (Cohen, 1988).

Procedures

Once parents had been consented and completed baseline assessments, teachers participated in a four-hour training session. The first half (2 hours) involved general classroom management, and the second half (2 hours) involved procedures of the TFS homeBase intervention.

Coaches then initiated the implementation of the school and home components of TFS intervention. In this study, the home component served as

the focus and is described below. (A resource manual describing these procedures in detail is available at the Sporis West website, (www.firststeptosuccess.org/resources.htm). During the Tertiary homeBase intervention, parents are encouraged to modify their parenting practices consistent with one or more of the five universal principles of positive behavior support. The principles practiced with parents are: 1) establish clear expectations; 2) directly teach the expectations; 3) reinforce the display of expectations; 4) minimize attention for minor inappropriate behaviors; and 5) establish clear consequences for unacceptable behavior (Sprague & Golly, 2013).

Typically, TFS homeBase was implemented in two to five home visit sessions that lasted approximately 45-60 minutes each (see Appendix A). The coach followed a five-step process to implement the homeBase component. First, coaches assessed the ecological aspects of the family through questioning and utilizing an activity that emphasized the discovery of values. This step was completed during the first home visit. Second, coaches assessed current parental practices through a structured interview to assess the parents' use of the five universal principles of the Positive Behavior Support program. This assessment was structured with the parent and child playing a cooperative game, which allowed the coach to observe and videotape social interactions between the parent and child. Coaches did not participate in the activity. Third, the coach returned for an additional visit and discussed the parent-child interaction with the

parent. This feedback was based upon parents' value assessments, recorded observations, and the universal principles interview (detailed in the manual). This interview begins with the coach and parent watching the video and the coach soliciting the parent's impressions of their performance in relation to the universal principles. Specifically, the coach solicits the parent's impressions of their skill with, as well as importance and confidence for, each universal principle. The fourth step, which was optional, is called consultation, education, and support. If parents opted for additional support, they worked with the coach to identify universal principles, or to work on the context of a daily routine (e.g., mealtime, homework, getting ready for school). Goals were discussed and set, and coaches implemented role-playing in order to increase parent behaviors and improve consistency with the universal principles. Parents also practiced the skills in vivo, and coaches provided performance feedback. After these skills were implemented, a final session was conducted. During the final session, the coach may make referrals to community agencies that support parenting, the targeted child, or family risk factors that had been identified.

Following the final visit and completion of the school component, parents completed a post-measurement package, which included the *Parenting Ladder* and *Satisfaction Survey*. Coaches also completed a checklist in order to evaluate the number of steps the parents completed over the course of the intervention.

Analysis

A description of each research question is described in this section. In addition, a brief description of how data were analyzed is included.

Questions used to guide the study were:

1. *To what extent was the Tertiary homeBase module delivered with fidelity ?* The *MITI* was used to assess implementation fidelity. The use of descriptive analysis (e.g., mean, average, and percentages) and MITI competency thresholds will determine the level of fidelity and level of Motivational Interviewing skills.
2. *To what extent do parents believe the Tertiary homeBase module is socially valid?* Parent satisfaction data will determine the extent to which parents believe the goals of the intervention were important, the procedures acceptable, and the desired outcomes obtained. Descriptive data (mean, percentage) will be used to judge the parents' perceptions of the intervention's social validity level.
3. *To what extent did parents' self-efficacy increase?* Before and after measurement of the *Parent Ladder* will be used to determine if post-test scores (mean scores) were significantly higher than pretest scores.

Data Management. There were specific steps executed in order to address missing data and data outliers. After data were inputted into statistical software (SPSS 20), dummy variables were used to replace missing data. In addition, the author used visual observations and a box plot test to identify

outlying data, in which a mean-score value was substituted to accommodate this error.

CHAPTER 5

RESULTS

This chapter describes results, first by describing the participants and then addressing each of the research questions. The outcomes are evaluated at case and aggregate levels. All data was checked for accuracy and responses were within normal ranges. The evaluation of TFS data reveled to what extent the Tertiary homeBase module was socially valid, implemented with fidelity, and associated with parent efficacy beliefs.

Participants

Thirty-three families consented to participate in the study. At pre and post stages of the intervention, 30 parents (98%) returned distributed questionnaires. As can be seen in Table 5.1, children participating in the study ranged in age from 6-10 years old with a mean age of 9 (1.3). While African-American (n=14, 44%) and Caucasian (n=14, 44%) participants made up the majority of the sample (90%), 10% (n=2) were Hispanic or Latino. A little more than two-thirds of the children were male (n=22, 69%). More than one-third (36%) of the children lived in a two-parent household. A majority of the parents were female (90%) and ranged in age from 28-67 years. Their average age was M (SD) = 42 (10.2). More than two-thirds (69%) of parents reported having a high school diploma or a

college degree. All coaches were Caucasian, and had a Master's degree, and consisted of 2 females and 1 male.

Variable		Coach n(%)	Child n(%)	Parent n(%)
Age *M* (SD)		--	9(1.3)	42(10.2)
Gender (%)	Female	2(66)	9(28.1)	--
	Male	1(33)	22(68.8)	--
Ethnicity *n* (%)	African-American	--	14(43.8)	14(43.8)
	Caucasian	3 (100)	14(43.8)	14(43.8)
	Hispanic or Latino	--	3(9.4)	3(9.4)
Education *n* (%)	Less than H.S. diploma	--	--	3(9.4)
	H.S. diploma	--	--	5(15.6)
	Some College	--	--	3(9.4)
	Bachelor's degree	--	--	11(34.4)
	Master's degree	3(100)	--	3(9.4)
	PhD or Other	--	--	6(20.1)

Table 5.1 Sample Characteristics

Research Questions

The proposed research questions are addressed in this section. Implementation fidelity, social validity level and parent efficacy change are addressed respectively.

Implementation Fidelity. Tertiary HomeBase is a crucial component of TFS. Coaches implemented four steps during visits to families' homes. The initial step entails coaches assessing and discovering parent values, goals and hopes

for their children. Secondly, coaches assessed parents' present practices, as well assessed practices that diverged from First Step's universal principles. The third step of the intervention provided parents with specific feedback based on the assessment conducted in earlier sessions. In addition, parents were encouraged to reflect on First Step's universal principles and to enhance their belief in the importance of the universal principles. An optional fourth step is offered to parents in which coaches negotiate with the parent a specific behavior-change plan for the child and additional consulting services which may include modeling, roleplaying, and pre-correcting. Coaches then make efforts to conclude their collaborative relationship with the parent with positive feedback.

Parents completing the first three steps of homeBase were categorized as "completers." As depicted in Table 5.2, one parent completed the first step and discontinued, while six completed only two steps. Thus, seven of 30 (26%) were characterized as non-completers. Seventeen (57%) completed three steps and six (20%) completed all four steps of the intervention. Seventy-seven percent of the parents were categorized as "completers."

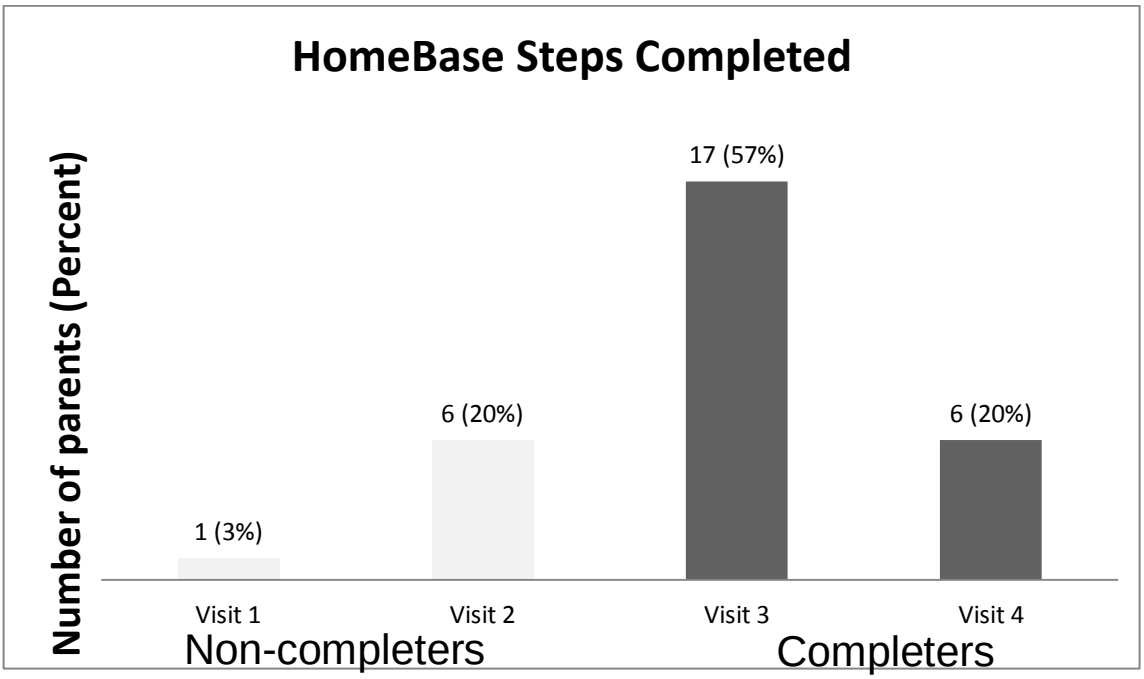


Chart 5.1 Results of Coaches Checklist (Fidelity)

In addition, during the home visits each parent and child engaged in prescribed activities such board games, card games, and other activities that required the parent to engage as an active participant with the child. During the second (Values Discovery) and third (Feedback Interview) visit family coaches audiotaped these two meeting with the parent and child. Through the utilization of the *MITI*, recorded dialogues were analyzed for rating of coaches' MI skills. Coaches were trained in the use of MI and were evaluated based upon their ability to implement the intervention during home visits. An independent rater hired by program administrator used a randomized process in which one-tenth of coaches audio-recorded sessions (n=10) were analyzed for MI quality (see Appendix D). The first five items on the MI quality scale (*MITI*) were based on a 1-5 point scale, while the second portion of the scale, which contained seven

items, were based on the number of hash marks, ratios, and percentages of coaches responses to parent engagement. The *MITI* outcomes reveled a rating for Global Spirit as M(SD) = 4.2(.53). Reflections to Question ratio was M (SD) = 1.86(1.13), percent of Open Questions M(SD) = .63(,23), and percent of Complex Questions was M(SD) = .72(.15). Standard ratings were used to categorize level of adherence for each recording, where proficiency was the highest level, followed by competency. Any adherence ratings below competency was considered outside MI quality standard. Two of the recordings received a competency rating, and seven of the recordings received a proficiency rating, while one of the recordings fell below these ratings (see Appendix D).

Socially Validity. The *Parent Satisfaction Survey*, a survey of 11 items with a rating scale of 1 to 5, 1 being *strongly disagree*, and 5 being *strongly agree*, teased out parents' satisfaction with the program. The scale gaged parents' perceptions and satisfaction levels, in addition, the survey considered how well parents considered the intervention's clarity and ease of use, as well as how parents saw the program's impact on the participating child. The satisfaction ratings are reported with an average score for each item (see table 5.3). Each item had a range of 0 – 5, with zero being very dissatisfied and five being very satisfied. The first column provides a mean rating for each item, and the second column shows the percentage of parents who rated each item above the benchmark rating of 4 or greater. The mean score was M(SD) = 4.76(.73) with a range of 4.33 to 4.87.

Satisfaction Items	Mean Rating (SD)	%above benchmark
The goals of the program were clearly explained to me.	4.80(.55)	73.4
The program was easy to use.	4.63(.67)	60.0
The program did not take much of my time.	4.43(.86)	50.0
I enjoyed doing the activities with my child.	4.73(.69)	66.7
I am satisfied with the change in behavior with my child.	4.57(.90)	63.4
I noticed changes in my child's behavior.	4.60(.86)	60.0
The program was effective in teaching my child appropriate behaviors.	4.67(.84)	66.7
The program had a positive effect on the rest of my family.	4.33(.96)	43.3
I liked getting daily feedback from the Green Red card.	4.77(.68)	63.3
I received on-going support help from Coach.	4.57(.86)	56.7
Recommend program to other parents.	4.87(.63)	73.3
Item Mean Score (M(SD)	4.76(.73)	

Table 5.2 Parent Satisfaction Outcomes *benchmark-rating of $\geq$4

Parent Self-Efficacy. Parent efficacy defines how knowledgeable, confident, and capable parents perceive themselves in their parenting. Parents rated themselves based upon the six parent efficacy items.

Results from the *Parent Ladder* are presented in Table 5.4. A composite total for each item was averaged and a change from pre to post intervention is displayed. All six of the measured items showed a positive increase, five of the six items showed a +.45 or greater increase. Parent knowledge of children growth and development (M(SD)=.17(1.17) had the least gain of the six items, while parent confidence in handling challenges (M(SD)=.59(1.05), showed the greatest increase. A comparison of composite baseline scores and composite post scores showed an increase in parent efficacy levels (M(SD) = 2.80(5.4). This difference was significant $t(28) = -2.79$, $p \leq .05$. It did represent a medium-sized effect $r = .35$.

Variable	Change in Mean(SD)
Knowledge of children growth and development.	+.17(1.17)
Confidence in knowing what's right for child.	+.45(1.15)
Confidence in handling challenges.	+.59(1.05)
Confidence in discipline.	+.55(1.38)
Ability to help child learn.	+.49(.99)
Ability to cope with stress.	+.55(1.48)
Mean Total (SD)	+.46(1.20)

Table 5.4 Pre-Post Parent Efficacy Ratings

The post ratings measured change in parent's perception from pre to post stages of the intervention. Results of parent efficacy survey showed a range of

.17 to .55 increases across all variables. There was a mean increase in all six ratings, with four of six ratings showing an increase above the mean rating of M(SD)=.46(1.20).

CHAPTER 6

DISCUSSION

Efforts to improve children's challenging behaviors has motivated the work of various disciplinary fields. The task to develop parental interventions that address children's behavior may be an even greater challenge. This evaluative study examines some of those factors such as fidelity challenges and the social validity issues related to TFS. More so, the investigation of these evaluative variables (fidelity, social validity, parent satisfaction) help determine the compatibility of the intervention within family environments particularly with parents (Frey et.al, 2013).

As stated, this evaluative study focuses on areas of fidelity, social validity, and levels of satisfaction. These areas are key standards for program adequacy, and what Laura Brotman calls, "family first" variables (Brotman et al. 2011). Brotman suggests program developers should consider how well interventions fit within the family environment before categorizing the intervention as valuable. Although this study stops short of measuring any improved conditions of children, it is the author's assumption that any positive parent ratings and satisfactory use of the intervention may lead toward the intervention being used in school and home settings. Furthermore, any positive findings of this evaluation may suggest that improved family conditions occurred due to the participation and

collaborative efforts of the TFS coaches and the positive experience of parents. Furthermore, the earlier proposed theories of Bronfrenbrenner and Miller state the importance of a healthy and well-established ecological system for the development of healthy children and healthy family life cycles. This has a similar expression within the First Step literature and a leading reason for the development of the TFS model. Moreover, TFS utilizes key components for promoting healthy parental relationships with children, hence, a good start for the beginning stages of a healthy and well-established ecological system. The following sections address research questions presented in this study.

This evaluation of TFS has a threefold goal. One, how socially valid is the intervention with parents? Two, how well did coaches comply with intervention protocols? And three, did parents improve in their self-efficacy beliefs after use of the intervention?

In answering the first question, parent approval ratings were convincing. Participating parents responded with high satisfaction results and coaching strategies seem to prove worthwhile, garnering high ratings. Given the efforts of the coaching staff to develop an accommodating environment for parents during the intervention process, is not too surprising for such positive outcomes.

Secondly, implementation ratings were equally encouraging. Outcomes showed a high percentage of parents completing the first three steps of the intervention and reveled coaches' high ratings of MI skills. This may suggest that parents were successfully engaged during the home visits and coaches

effectively implemented the intervention with satisfactory competency ratings. Again, efforts contributed by coaches may have provided a supportive environment for parents to complete each of the homeBase steps, logically leading to a higher percentage of parents completing. In addition, coaches participated in MI training workshops prior to this research project, which may have led to greater competency skills with the MI model.

Finally, the efficacy outcomes were encouraging. The intervention showed improved parent conditions, which is a proximal outcome presumably affected by participation in the home component. Theses efficacy measures improved on five of six categories, with statistically significance outcomes on each improved condition. This may suggest parental-efficacy improved after use of the intervention. Furthermore, this may also speak to the encouragement parents experienced through the support of coaches, subsequently boosting confidence in parenting abilities. The following sections present a more expanded summary of findings, some limitations of the evaluation, and suggested thoughts to consider for further advancement of TFS.

Outcomes

TFS advances the knowledge of parental interventions, social work practice and education research in multiple ways. First, the use of this parent intervention allows coaches to provide support to difficult child behavior on several levels. First, parents are provided social support through the homeBase component, and offered new skills for managing the child's behavior. Second,

the model incorporates the highly researched Motivation Interviewing (MI) model, which has quickly become a heavily relied upon social work archetypal (Madsen, 2006). MI is a vital component of TFS and its use with families sets the stage for embarking on new territories of parenting practice (Frey et al., 2011). Third, TFS engages families at children's most critical points of social learning and development. Children are rapidly transitioning through multiple stages of development, and many of these stages are crucial for successful learning and social achievement Hutchinson, 2010). Fourth, Allen-Meares and Lane (1983)'s work in school and social work settings point to the significance of children having a healthy ecological environment. TFS offers parents a platform for the development of a healthy social environment. Fifth, TFS adds to the First Step literature, a tested family intervention model that incorporates education, behavior, and social standards for some of the most challenging issues of young children (Walker, 1998). Many of the studies previously conducted by First Step were often limited in displaying the impact of the homeBase component. This study adds to the knowledge of First Step's homeBase.

Implementation Fidelity of TFS. An overview of First Steps literature reveals key concerns around implementation fidelity during stages of implementation (Walker et al. 2012). In fact, Golly, Stiller, and Walker (1998) considered replication challenges as chief concerns during implementation of the intervention. This is the first research question addressed in the study.

The findings of this evaluative study showed that more than 60% of the rated audio recordings of coaches received a “competency” or “proficiency” rating. This may suggest TFS can be replicated with relatively high levels of fidelity, given that coaches are provided the same level of training. In addition, 98% of TFS’ coaching strategies were implemented with more than 90% of the participating parents.

Social Validity of TFS. The second question seeks to determine how socially valid is TFS. Social validity ratings explain the extent to which participants believe the goals of the intervention were important, the procedures acceptable and desired outcomes obtained. Coaches enlisted parents and guardians as partners to help answer this query. Initial results indicate a majority of the parents agreed the intervention was satisfactory.

In addition, parents reported consistent high ratings of approval for the intervention and their assigned coaches. The average rating on the 12-item satisfactory scale was 4.2 on a 5-point scale. A mean composite score of M (SD) = 51(6.5), with a range of 34–60. These high satisfaction ratings by parents may have its basis in the brevity of the homeBase component. Furthermore, the intervention consisted of approximately six, 45-60 minute sessions, which seem to accommodate the schedule of highly active parents and families. More so, the intervention takes into consideration parental responsibilities by scheduling sessions around busy family schedules. This may suggest the implemented coaching strategies (engagement, assess, feedback, consultation) enhances the

ecological environment of families, which is a critical component to the development of healthy families and young children (Shaw, 2006).

Parental Self-Efficacy Levels. The third question seeks to answer any change in parent's efficacy beliefs through involvement. TFS is a series of parent-coach collaborative sessions designed to enable parents to build child competencies skills that affect the child's adjustment to, and performance in school. The use of the *Parent Ladder,* a six item rating scale, was vital in assessing how well parents took to the task of implementing these targeted skills with their children. Parent beliefs in their own parental skills improved on all six rated items of the *Parent Ladder.* This improvement may suggest that the intervention gives parents a lift in their self-confidence of day-to-day management skills desired for children with challenging behaviors. In as much, this is a much-needed boost for parents who have experienced diminishing effectiveness in improving the conditions of children with severe behaviors.

Limitations

The positive outcomes derived from this study are encouraging. However, with these encouraging results, some limitations to the study should be considered. Here, analyses of some of the limitations are observed and discussed creating some guidelines for interpreting the conclusions of this study and thoughts for future replications efforts.

A limitation of this study was the inability to control threats to internal validity. One particular area of concern is the possible social pressure that may

compel skewed responses from parents. The naturally bonding relationship between coaches and participating parents is encouraged within the MI model and relegates the success of movement through stages of the intervention. Although this bonding is essential, the nature of participants being inadvertently compelled to respond in a certain manner may play a part in parental responses to the assessment surveys.

Next, threats to external validity include a couple of issues. First, an expanded number of participating teachers and parents would help to generalize the findings. The recruiting process enlisted a substantial number of interested teachers and parents across two school districts in the Kentucky-Indiana region. However, within the recruiting process the number of teachers and parents dwindled significantly, hence reducing the sample size to n=33. More specifically, having a larger sample of teachers and parents may offer stronger conclusions on how different groups of races, school districts, and diverse families are impacted. For instance, how differently would Hispanic parents respond to African-American coaches or teachers in this study? The limited sample of participants may not necessarily characterize a broader representation of parents who would generally utilize the intervention.

Finally, demographic data reveled that each of the three coaches of TFS held Master's degrees. The use of master level coaches may pose some replication challenges for coaches of different education backgrounds. With the use of in vivo settings as a point of intervention, less educated coaches may

produce different outcomes. In addition, relevant literature highlights the challenges of mastering MI skills at a competency level for efficient effectiveness (Frey et al., 2013; Lee et al., in press). This may be the reason for utilizing master-degree coaches, yet creating some challenges for replication studies.

Implications for Practice

This study adds to the literature of social work and education on various facets. The TFS intervention model works well with parents of school-age children, and positive parental outcomes were gained. In addition, parents could find the modules of this intervention as an efficient training element for coping with children's challenging behaviors. This and other considerations for the practicality of TFS are presented in this section.

The ecological model of Bronfrenbrenner reminds us that children need healthy families and efficient parental practices in order to thrive. The goal of TFS aligns well with this ecological model. Conscientious parents strive to maintain homeostasis in the family environment, especially with children with difficult behaviors.

In addition, family psychologist Gerald Patterson suggests children's difficult and problematic behavior as grounded in social-learning interactions (Patterson, 1989). Other theorist suggests the beginning of negative childhood behaviors and social skills often start from variant sources such as peers, community, and the family environment (Bulotsky- Shearer, Domínguez, Bell, Rouse, & Fantuzzo, 2010; Karreman, Van Tuijl, Van Aken, & Deković, 2009).

TFS counters the end result of negative social interactions by promoting positive and usable parenting skills.

Finally, the brevity, flexibleness, and use of MI within the TFS model are welcomed in today's rapidly expanding intervention driven field. Often interventionists are faced with the challenge of integrating clinical objectives with the daily schedules of busy families. The compatibility of TFS is accomplished by its short 45 – 60 minute sessions. In addition, parents are given the option to schedule at the most convenient times for optimal implementation success. The plasticity and power sharing may boost parental confidence, giving some control to parents in the implementation process, which is a chief interest of TFS.

Recommendations for Further Research

The use of TFS within home settings demonstrates the intervention's potential to be implemented within acceptable fidelity range, social validity ratings and improved parental efficacy levels. Relevant areas that still need answering include sampling issues, outcomes on comparison group, and replication process with use of the manual.

A larger sample size would help consumers determine attributes of the study that fit well with certain client population. In other words, how well does the intervention work with grandparents, foster parents, adoptive parents, etc.

In addition, the manualized intervention offers systematic procedures for implementation tasks; however, cost to replicate such procedures become important questions. Being able to determine implementation cost with families is

an important aspect in determining the capabilities and usage ability of the intervention. Furthermore, an understanding of cost would help agencies and school systems to establish and meet budget requirements. Better yet, a better understanding of cost for each logistical task of TFS, may allow program administrators to amend portions of the intervention to better fit their intervention goals.

Likewise, with the development of the TFS Manual, replication procedures for coaches of various educated levels are addressed. The manual, developed as an additive to the intervention, and with the funding from IES grant money, allows prescribed techniques to be utilized with families by paraprofessionals. This benefit enhances the success of fidelity procedures and overall successful replication of the intervention. However, no data has emerged testing the usefulness of the manual with coaches.

Lastly, the initial design of TFS was to address parenting skills by developing child competence in key performance areas that are related to success in school (Walker, Golly, McLane, & Kimmich, 2005). What is yet to be known is how outcomes of improved parental behavior relate to children's classroom behavior, and better yet, improved academic outcomes? Interested parties may be willing to adopt the intervention procedures depending on its value toward important classroom objectives. Teachers often see child related interventions worth the investment as they see the usefulness of it in helping

children achieve academically (Bulotsky- Shearer, Domínguez, Bell, Rouse, & Fantuzzo, 2010).

Conclusion

TFS' design supports parents and guardians in developing competencies and skills that promote better child performances and adjustments to school. This evaluative study of TFS provides evidence for interventions for countering the trajectory of children headed toward negative behavioral outcomes. Furthermore, the improved conditions of parental beliefs and the impressive fidelity and social validity ratings of TFS offer some promising solutions to parent training programs. It is a beginning to understanding how collaborative social work and education models promote healthy environmental conditions of young children.

REFERENCES

Achenbach, T.M., Becker, A., Dopfner, M., Heierveng, E., Rothenfeger, A. (2008) Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: research findings, applications, and future directions. *Journal of Child Psychology & Psychiatry*, 49(3), 251-275.

Ak, L., & Sayil, M. (2006). Three different types of elementary school students' school achievement, perceived support, school attitudes and behavior-adjustment problems. *Educational Sciences: Theory & Practice*. 6(2), 293-300.

Allen-Meares, P., & Lane, B. A. (1983). Assessing the adaptive behavior of children and youths. *Social Work*, 28(4), 297-301.

Ansbacher, H. L. (1978). The development of Adler's concept of social interest: a critical study. *Journal of Individual Psychology*, 34(2), 118.

Arseneault, L., Walsh, E., Trzesniewski, K., Newcombe, R., Caspi, A., & Moffitt, T.E. (2006). Bullying victimization uniquely contributes to adjustment problems in young children: a nationally representative cohort study. *Pediatrics*, 118(1), 130-138.

Bada, H. S., Bann, C. M., Bauer, C. R., Shankaran, S., Lester, B., LaGasse, L.,Higgins, R. (2011). Preadolescent behavior problems after prenatal cocaine exposure: relationship between teacher and caretaker ratings (Maternal Lifestyle Study). *Neurotoxicology & Teratology*, 33(1), 78-87.

Bagner, D. M., & Eyberg, S. M. (2003). Father involvement in parent training: when does it matter? *Journal of Clinical Child & Adolescent Psychology*, 32(4), 599-605.

Baker, C., Arnold, D., & Meagher, S. (2011). Enrollment and attendance in a parent training prevention program for conduct problems. *Prevention Science*, 12(2), 126-138

Baker, J. A., Clark, T. P., Crowl, A., & Carlson, J. S. (2009). The influence of authoritative teaching on children's school adjustment: are children with behavioral problem differentially affected? *School Psychology International*, 30(4), 374-382

Barnett, M. A., Shanahan, L., Deng, M., Haskett, M. E., & Cox, M. J. (2010). Independent and interactive contributions of parenting behaviors and beliefs in the prediction of early childhood behavior problems. *Parenting: Science & Practice*, 10(1), 43-59.

Beard, K. Y., & Sugai, G. (2004). First Step to Success: an early intervention for Elementary children at risk for antisocial behavior. *Behavioral Disorders, 29*(4), 396-409.

Breevaart, K., & Bakker, A. B. (2011). Working parents of children with behavioral problems: a study on the family-work interface. *Anxiety, Stress & Coping*, 24(3), 239-253.

Briggs-Gowan, M. J., Carter, A. S., Skuban, E. M., & Horwitz, S. M. (2001). Prevalence of social-emotional and behavioral problems in a community sample of 1- and 2-year-old children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(7), 811.

Brook, J. S., Rubenstone, E., Chenshu, Z., Brook, D. W., & Rosenberg, G. (2011). A three-generational study of risk factors for childhood externalizing behavior among African Americans and Puerto Ricans. *Journal of Urban Health, 88*(3), 493-506.

Bronfenbrenner, U. (1979). *The Ecology of Human Development.* . Cambridge, MA: Harvard University Press.

Brotman, L. M., Calzada, E., Huang, K.-Y., Kingston, S., Dawson-McClure, S., Kamboukos, D., . Petkova, E. (2011). Promoting effective parenting practices and preventing child behavior problems in school among ethnically diverse families from underserved, urban communities. *Child Development*, 82(1), 258-276.

Bulotsky- Shearer, R. J., Domínguez, X., Bell, E. R., Rouse, H. L., & Fantuzzo, J. W. (2010). Relations between behavior problems in classroom social and learning situations and peer social competence in head start and kindergarten. *Journal of Emotional & Behavioral Disorders*, 18(4), 195-210.

Burns, M. K. (2011). School psychology research: combining ecological theory and prevention science. *School Psychology Review, 40*(1), 132-139.

Callahan, K. L., Scaramella, L. V., Laird, R. D., & Sohr-Preston, S. L. (2011). Neighborhood disadvantage as a moderator of the association between harsh parenting and toddler-aged children's internalizing and externalizing problems. *Journal of Family Psychology, 25*(1), 68-76.

Carr, A. (2009). The effectiveness of family therapy and systemic interventions for child-focused problems. *Journal of Family Therapy, 31*(1), 3-45.

Carter, A. S., Wagmiller, R. J., Gray, S. A. O., McCarthy, K. J., Horwitz, S. M., & Briggs-Gowan, M. J. (2010). Prevalence of DSM-IV disorder in a representative, healthy birth cohort at school entry: sociodemographic risks and social adaptation. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(7), 686-698.

Caughy, M., Franzini, L., Windle, M., Dittus, P., Cuccaro, P., Elliott, M., & Schuster, M. (2012). Social competence in late elementary school: relationships to parenting and neighborhood context. *Journal of Youth & Adolescence, 41*(12), 1613-1627.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Lawrence Erlbaum Associates.

Connell, A., Bullock, B. M., Dishion, T. J., Shaw, D., Wilson, M., & Gardner, F.

(2008). Family intervention effects on co-occurring early childhood behavioral and emotional problems: a latent transition analysis approach. *Journal of Abnormal Child Psychology*, 36(8), 1211-1225.

Diken, I. H., & Rutherford, R. B. (2005). First step to success early intervention program: a study of effectiveness with native-American children. *Education & Treatment of Children (ETC), 28*(4), 444-465.

Dishion, T. J., Nelson, S. E., Kavanagh, K., Beidel, D., Brown, T. A., Lochman, J., & Haaga, D. F. (2003). The Family Check-up with high-risk young adolescents: preventing early-onset substance use by parent monitoring. *Behavior Therapy*, 34(4), 553-571.

Dishion, T. J., Shaw, D., Connell, A., Gardner, F., Weaver, C., & Wilson, M. (2008).The Family Check-Up with high-risk indigent families: preventing problem behavior by increasing parents' positive behavior support in early childhood. *Child Development*, 79(5), 1395-1414. doi: 10.1111/j.1467-8624.2008.01195.x

Dishion, T., & Stormshak, E. (Eds.). (2007). *Interviewing in children's lives: An ecological, family-centered approach to mental health care.* Washington, DC: American Psychological Association.

Domínguez, X., Vitiello, V. E., Maier, M. F., & Greenfield, D. B. (2010). A longitudinal examination of young children's learning behavior: child-level and classroom-level predictors of change throughout the preschool year. *School Psychology Review*, 39(1), 29-47.

Drugli, M. B., Larsson, B., Clifford, G., & Fossum, S. (2007). Pervasive and non-pervasive conduct problems in a clinic sample aged 4-8 years: child, family and day-care/school factors. *Scandinavian Journal of Educational Research*, 51(5), 547-559.

Feil, E., Frey, A.J., Walker, H.M., Seeley, J., golly, A., & Small, J. (Submitted January 2013) School and home intervention for young children with challenging behaviors: Preschool First Step to Success. *Submitted for publication*.

Feldstein, A., & Glasgow, R. (2008). A practical, robust implementation and sustainability Model (PRISM) for integrating research findings into practice. *The Joint Commission Journal on Quality and Patient Safety*, 34(4), 228-243.

Finn, J. D. (1998). Parental engagement that makes a difference. *Educational Leadership, 55*(8), 20-24. Fixsen, D.L., Blasé, K.A., Timbers, G.D., & Wolf, M.M. (2007). In search of program implementation: 792 replications of the teaching-family model. *Behavior Analyst Today*, 8(1), 96-110.

Foti, K., Balaji, A., & Shanklin, S. (2011). Uses of youth risk behavior survey and School Health profiles data: applications for improving adolescent and school health. *Journal of School Health, 81*(6), 345-354.

Frey, A.J., Cloud, R., Lee, J., Small, J., Seeley, J.R., Feil, E.G., Golly, A. (2011). The promise of Motivational Interviewing in School Mental Health. *School Mental Health* 3(1), 1-12.

Frey, A.J., Lee, J., Small, J.W., Seeley, J.R., Walker, H.M., & Feil, E. (2013). Motivational Interviewing Navigation Guide: A process for enhancing teacher's motivation to adapt and implement school-based interventions. *Advances in School Mental Health Promotion.*

Frey, A.J., Sabatino, C., & Alvarez, M. (2013). Consultation to improve treatment integrity. *Editorial*.

Frey, A.J., Small, J., Lee, J., Walker, H.M., Seeley, J., Feil, E., & Golly, A. (2013). Expanding the range of the First Step to Success intervention: tertiary-level support for teachers and families. *Submitted for publication.*

Frey, A.J., Small, J.W. Seeley, J.R., Feil, E., Walker, H.W., & Golly, A. (2013). The feasibility of First Step to Success with preschoolers. *Children & Schools*.

Frey, K. S., Hirschstein, M. K., & Guzzo, B. A. (2000). Second step: preventing aggression by promoting social competence. *Journal of Emotional & Behavioral Disorders, 8*(2), 102

Gardner, F., Trentacosta, C. J., Dishion, T. J., Connell, A., Shaw, D. S., & Wilson Moderators of outcome in a brief family-centered intervention for preventing early problem behavior. *Journal of Consulting & Clinical Psychology*, 77(3), 543-553

Gay, G. (2007). The rhetoric and reality of NCLB. *Race, Ethnicity & Education*, 10(3), 279-293.

Gillespie, J. F., & Durlak, J. A. (1995). Screening children at risk for school maladjustment: further evidence for the value of the aml. *Journal of Community Psychology, 23*(1), 18-27.

Golly, A., Sprague, J., Walker, H., Beard, K., & Gorham, G. (2000). The First Step to Success Program:an analysis of outcomes with identical twins across multiple baselines. *Behavioral Disorders, 25*(3), 170.

Golly, A., Stiller, B., & Walker, H. M. (1998). First Step to Success: replication and Social validation of an early intervention program. *Journal of Emotional & Behavioral Disorders*, 6(4), 243.

Guercio, R. D. (2011). Back to the basics of classroom management. *Education Digest, 76*(5), 39-43.

Hay, D. F., Hudson, K., & Liang, W. (2010). Links between preschool children's prosocial skills and aggressive conduct problems: the contribution of ADHD symptoms. *Early Childhood Research Quarterly*, 25(4), 493-501.

Henry, K. L., & Thornberry, T. P. (2010). Truancy and escalation of substance use during adolescence. *Journal of Studies on Alcohol & Drugs, 71*(1), 115-124.

Hester, P. P., Hendrickson, J. M., & Gable, R. A. (2009). Forty Years Later -- The value of praise, ignoring, and rules for preschoolers at risk for behavior disorders. *Education & Treatment of Children*, 32(4), 513-535.

Hoagwood, K. E., Olin, S. S., Kerker, B. D., Kratochwill, T. R., Crowe, M., &

Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional & Behavioral Disorders*, 15(2), 66-92.

Horner, R. H., Sugai, G., Todd, & Lewis-Palmer (Eds.). (2005). *School-wide Behavioral Support*: New York - Guilford Press.

Huang, C.-C., Wang, L.-R., & Warrener, C. (2010). Effects of domestic violence on behavior problems of preschool-aged children: do maternal mental health and parenting mediate the effects? *Children & Youth Services Review*, 32(10), 1317-1323.

Hutchinson, E. (2010). *Essential of Human Behavior*. Boston: Sage.

Ingoldsby, E. M., Shaw, D. S., Winslow, E., Schonberg, M., Gilliom, M., & Criss, M. M. (2006). Neighborhood disadvantage, parent–child conflict, neighborhood peer relationships, and early antisocial behavior problem trajectories. *Journal of Abnormal Child Psychology, 34*(3), 293-309. doi: 10.1007/s10802-006-9026-y

Jenson, J. M. (2007). Neighborhood and community effects on individual behavior and social functioning, editorial. *Social Work Research,* pp. 195-197.

Johns, B. H., Crowley, E. P., & Guetzloe, E. (2008). Engaged time in the classroom. *Focus on Exceptional Children, 41*(4), 1-6.

Johnson, V., & Lieberman, A. (2007). Variations in behavior problems of preschoolers exposed to domestic violence: the role of mothers' attunement to children's emotional experiences. *Journal of Family Violence, 22*(5), 297-308.

Johnson, M. E., & Waller, R. J. (2006). A review of effective interventions for youth with aggressive behaviors who meet diagnostic criteria for conduct disorder or oppositional defiant disorder. *Journal of Family Psychotherapy*, 17(2), 67-80.

Jones, K., Daley, D., Hutchings, J., Bywater, T., & Eames, C. (2008). Efficacy of the incredible years programme as an early intervention for children with conduct problems and adhd: long-term follow-up. *Child: Care, Health & Development, 34*(3), 380-390.

Karreman, A., Van Tuijl, C., Van Aken, M. A. G., & Deković, M. (2009). Predicting Young children's externalizing problems: interactions among effortful control, parenting, and child gender. *Merrill-Palmer Quarterly*, 55(2), 111-134.

Kazdin, A. E., & Crowley, M. J. (1997). Moderators of treatment outcome in cognitively based treatment of antisocial children. *Cognitive Therapy & Research*, 21(2), 185-207.

Kutash, K., Duchnowski, A. J., Green, A. L., & Ferron, J. M. (2011). Supporting parents who have youth with emotional disturbances through a parent-to-parent support program: a proof of concept study using random assignment. *Administration & Policy in Mental Health & Mental Health Services Research*, 38(5), 412-427.

Lane, K. L., Barton-Arwood, S. M., Nelson, J. R., & Wehby, J. (2008). Academic performance of students with emotional and behavioral disorders served in a self-contained setting. *Journal of Behavioral Education, 17*(1), 43-62.

Lavigne, J. V., LeBailly, S. A., Gouze, K. R., Binns, H. J., Keller, J., & Pate, L. (2010). Predictors and correlates of completing behavioral parent training for the treatment of oppositional defiant disorder in pediatric primary care. *Behavior Therapy*, 41(2), 198-211.

Lee, K. (2010). Do early academic achievement and behavior problems predict long-term effects among Head Start children? *Children and Youth Services Review*, 32(12), 1690-1703.

Lee, J., Frey, A.J., Seeley, J., Small, J., Walker, H.M., Golly, A., Feil, E.G., Ratcliffe, P. & Rutledge, A. (in press). Adapting Motivational Interviewing to an early intervention Addressing challenging behavior: Applications with teachers. In E. McNamera's Motivational Interviewing with Children and Young People: Issues and Further Applications. *Positive Behavior Management*, Ainsdale, Southport, Merseyside PR8, United Kingdom.

Leventhal, T., & Brooks-Gunn, J. (2011). Changes in neighborhood poverty from 1990 to 2000 and youth's problem behaviors. *Developmental Psychology, 47*(6), 1680-1698.

Lima, J., Caughy, M., Nettles, S. M., & O'Campo, P. J. (2010). Effects of cumulative risk on behavioral and psychological well-being in first grade: moderation by neighborhood context. *Social Science & Medicine, 71*(8), 1447-1454.

Ljusberg, A.-L. (2011). The structured classroom. *International Journal of Inclusive Education*, 15(2), 195-210.

Loe, I. M., Lee, E. S., Luna, B., & Feldman, H. M. (2011). Behavior problems of 9–16 year old preterm children: biological, sociodemographic, and intellectual contributions*. Early Human Development*, 87(4), 247-252.

Lundahl, B.,Tollefson, D., Risser, H., & Lovejoy, M. C. (2008). A meta-analysis of father involvement in parent training. *Research on Social Work Practice*, 18(2), 97-106.

Maag, J. W., & Katsiyannis, A. (2010). Early intervention programs for children with Behavior problems and at risk for developing antisocial behaviors: evidence- and research-based practices. *Remedial & Special Education*, 31(6), 464-475.

Madson, M. B., & Campbell, T. C. (2006). Measures of fidelity in motivational enhancement: A systematic review. *Journal of Substance Abuse Treatment, 31*(1), 67-73.

McDonald, R., Jouriles, E. N., Tart, C. D., & Minze, L. C. (2009). Children's Adjustment problems in families characterized by men's severe violence toward women: Does other family violence matter? *Child Abuse & Neglect, 33*(2), 94-101.

McLaren, E. M., & Nelson, C. M. (2009). Using Functional Behavior Assessment to Develop Behavior Interventions for Students in Head Start. *Journal of Positive Behavior Interventions, 11*(1), 3-21.

Middleton, M., Scott, S. L., & Renk, K. (2009). Parental depression, parenting behaviors, and behavior problems in young children. *Infant & Child Development*, 18(4), 323-336.

Modry-Mandell, K. L., Gamble, W. C., & Taylor, A. R. (2007). Family emotional climate and sibling relationship quality: influences on behavioral problems and adaptation in preschool-aged children. *Journal of Child & Family Studies*, 16(1), 59-71.

Montes, G., Lotyczewski, B., Halterman, J., & Hightower, A. (2012). School readiness among children with behavior problems at entrance into kindergarten: results from a US national study. *European Journal of Pediatrics, 171*(3), 541-548.

Moyers, T., Martin, T., Manuel, J., Hendrickson, S., & Miller, W. (2005). Assessing competence in the use of motivational interviewing. *Journal of Substance Abuse Treatment,* 28, 19-26.

Muñoz, M. A., Potter, A. P., & Ross, S. M. (2008). Supplemental educational services as a consequence of the nclb legislation: evaluating its impact on student achievement in a large urban district. *Journal of Education for Students Placed at Risk, 13*(1), 1-25.

Neece, C., & Baker, B. (2008). Predicting maternal parenting stress in middle childhood: the roles of child intellectual status, behaviour problems and social skills. *Journal of Intellectual Disability Research, 52*(12), 1114-1128.

Nelson, C. M., Jolivette, K., Leone, P. E., & Mathur, S. R. (2010). Meeting the needs of at-risk and adjudicated youth with behavioral challenges: the promise of juvenile justice. *Behavioral Disorders, 36*(1), 70-80.

Nelson, J. R., Hurley, K. D., Synhorst, L., Epstein, M. H., Stage, S., & Buckley, J. (2009). The child outcomes of a behavior model. *Exceptional Children, 76*(1), 7-30.

Nock, M., & Ferriter, C. (2005). Parent management of attendance and adherence in child and adolescent therapy: a conceptual and empirical review. *Clinical Child & Family Psychology Review*, 8(2), 149-166.

Nock, M.K., Ferriter, C., & Holmber, E. (2007). Parent beliefs about treatment credibility and Effectiveness: assessment and relation to subsequent treatment participation. *Journal Child & Family Studies*, 16(1), 27-38.

Overton, S., McKenzie, L., King, K., & Osborne, J. (2002). Replication of the first step to success model: a multiple-case study of implementation effectiveness. *Behavioral Disorders, 28*(1), 40-56.

Parker, D. C., Nelson, J. S., & Burns, M. K. (2010). Comparison of correlates of classroom behavior problems in schools with and without a school-wide character education program. *Psychology in the Schools, 47*(8), 817-827.

Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44(2), 329-

335.
Perry, K. E., & Weinstein, R. S. (1998). The social context of early schooling and children's school adjustment. *Educational Psychologist*, 33(4), 177.
"Playing Hooky": Examining factors that contribute to adolescent truancy. (2011). *Sociological Viewpoints, 27*, 15-23.
Prinz, R. J., & Miller, G. E. (1994). Family-based treatment for childhood antisocial behavior: Experimental influences on dropout and. *Journal of Consulting & Clinical Psychology*, 62(3), 645.
Reid, K. (2005). The causes, views and traits of school absenteeism and truancy. *Research in Education*(74), 59-82.
Reinke, W., Lewis-Palmer, T., Merrell, K. (2008). The Classroom Check-up: a class wide teacher consultation model for increasing praise and decreasing disruptive behavior. *School Psychology Review*, 37(3), 315-332.
Rinaldi, C. M., & Howe, N. (2012). Mothers' and fathers' parenting styles and associations with toddlers' externalizing, internalizing, and adaptive behaviors. *Early Childhood Research Quarterly, 27*(2), 266-273.
Shaw, D. S., Supplee, L., Arnds, K., Dishion, T. J., & Gardner, F. (2006). Randomized trial of a family-centered approach to the prevention of early conduct problems: 2-year effects of the family check-up in early childhood. *Journal of Consulting & Clinical Psychology*, 74(1), 1-9.
Skinner, E., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: a Motivational model. *Parenting: Science & Practice*, 5(2), 175-235.
Sprague, J., & Perkins, K. (2009). Direct and collateral effects of the first step to success program. *Journal of Positive Behavior Interventions, 11*(4), 208-221.
Stormshak, E. A., & Dishion, T. J. (2009). A school-based, family-centered intervention to prevent substance use: the family check-up. *American Journal of Drug & Alcohol Abuse*, 35(4), 227-232.
Stormshak, E. A., & Webster-Stratton, C. (1999). The qualitative interactions of children with conduct problems and their peers: differential correlates with self-report measures, home behavior, and school behavior problems. *Journal of Applied Developmental Psychology, 20*(2), 295-317.
Sumi, C., Woodbridge, M., Javitz, H., Thornton, S. P., Wagner, M., Rouspil, K., Severson, H. H. (2012). Assessing the effectiveness of First Step to Success: are short-term results the first step to long-term behavioral improvements? *Journal of Emotional & Behavioral Disorders, 20*(10), 1-14.
Tervo, R. C. (2010). Attention problems and parent-rated behavior and stress in young children at risk for developmental delay. *Journal of Child Neurology*, 25(11), 1325-1330.
Uebelacker, L. A., Hecht, J., & Miller, I. W. (2006). The family check-up: a pilot study of a brief intervention to improve family functioning in adults. *Family Process*, 45(2), 223-236.
Vasil, J., & Andrew, B. W. (2011). Policy windows, public opinion, and policy

ideas: The evolution of No Child Left Behind. *Quality Assurance in Education: An International Perspective*, 19(1), 8-27.

Veenstra, R., Lindenberg, S., Tinga, F., & Ormel, J. (2010). Truancy in late elementary and early secondary education: the influence of social bonds and self-control--the TRAILS study. *International Journal of Behavioral Development, 34*(4), 302-310.

Votruba-Drzal, E., Coley, R. L., Maldonado-Carreño, C., Li-Grining, C. P., & Chase-Lansdale, P. L. (2010). Child care and the development of behavior problems among economically disadvantaged children in middle childhood. *Child Development*, 81(5), 1460-1474.

Wagner, M. M., Sumi, W. C., Woodbridge, M. W., Javitz, H. S., & Thornton, S. P. (2009). The national behavior research coordination center: coordinating research and implementation of evidence-based school interventions for children with serious behavior problems. *Journal of Emotional & Behavioral Disorders, 17*(4), 244-249.

Wakschlag, L. S., Leventhal, B. L., Briggs-Gowan, M. J., Danis, B., Keenan, K., Hill, C., Carter, A. S. (2005). Defining the "disruptive" in preschool behavior: what diagnostic observation can teach us. *Clinical Child & Family Psychology Review*, 8(3), 183-201.

Walker, H. M., Golly, A., McLane, J. Z., & Kimmich, M. (2005). The Oregon first step to success replication initiative: statewide results of an evaluation of the program's impact. *Journal of Emotional & Behavioral Disorders*, 13(3), 163-172.

Walker, H. M., Seeley, J. R., Feil, E. G., Small, J., Golly, A., Frey, A., Forness, S. R. (2012). Evidence base of the First Step to Success early intervention for preventing emerging antisocial behavior patterns, from *http://www.firststeptosuccess.org.*

Walker, H. M., Seeley, J. R., Small, J., Severson, H. H., Graham, B. A., Feil, E. G., Forness S. R. (2009). A randomized controlled trial of the first step to success early intervention: demonstration of program efficacy outcomes in a diverse, urban school district. *Journal of Emotional & Behavioral Disorders*, 17(4), 197-212.

Walker, H.M., Severson, H.H., Feil, E.G., Stiller, B., & Golly, A. (1998). First Step to Success: Intervening at the point of school entry to prevent antisocial behavior. Psychology in the Schools, 35(3), 259.

Walker, H., Serverson, H., Nicholson, F., Kehle, T., Jenson, W., & Clark, E. (1994). Replication of the systematic screening for behavior disorders (ssbd) procedure for the identification of at-risk children. *Journal of Emotional & Behavioral Disorders, 2*(2), 66-77.

Walter, J. S. (2006). The basic IDEA: the Individuals with Disabilities Act in your classroom. *Teaching Music, 14*(3), 22-26.

Webster-Stratton, C., Reid, M. J., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: evaluation of the Incredible Years teacher and child training programs in high-risk schools. *Journal of Child Psychology & Psychiatry, 49*(5), 471-488.

Whipple, S. S., Evans, G. W., Barry, R. L., & Maxwell, L. E. (2010). An ecological perspective on cumulative school and neighborhood risk factors related to achievement. *Journal of Applied Developmental Psychology*, 31(6), 422-427.

Wiggins, T. L., Sofronoff, K., & Sanders, M. R. (2009). Pathways Triple P-Positive Parenting Program: effects on parent-child relationships and child Behavior problems. *Family Process, 48*(4), 517-530.

Wu, Y. P., Messner, B. M., & Roberts, M. C. (2010). Children's psychosocial problems presenting in a family medicine practice. *Journal of Clinical Psychology in Medical Settings*, 17(3), 203-210.

APPENDIX A

HomeBase Steps

The Motivational Interviewing Navigation Guide (MING) is a process for increasing intrinsic motivation to adopt and implement evidence-based practices (EBP) with integrity in school and home settings (Frey et al. 2013; Lee et al. in press). The MING supported the development of Tertiary homeBase intervention procedures. The MING steps include: 1) engage in values discovery; 2) assess current practices; 3) share performance feedback; 4) offer extended consultation education and support; and 5) provide closure. The Tertiary homeBase procedures, articulated fully in the intervention manual, adhere to these steps. A summary of these steps within the Tertiary homeBase framework are provided below.

Step 1. Engage in Values Discovery. The first step of the MING includes, the development of a working alliance, an ecological assessment, and a values discovery activity. The activity and tools articulated for Step 1 are designed to identify, validate, and affirm parent and teacher values and contribute to the development of a strong working alliance. A brief, informal ecological assessment allows the coach to learn more about the family or classroom environment and the values discovery activity is important to the entire MING process, as the information gathered is utilized during later steps for increasing motivation to adopt the five universal principles.

Step 2. Assess Current Practices. Current practices data is collected in relation to parent and teachers' use of the five universal principles. For both the parent and

teacher, this assessment has two main components; the Universal Principles Interview, and the Observation of the Universal Principles.

The Universal Principles Interview assists the coach in learning about existing practices that are consistent with- or potentially in conflict with-the universal principles. Throughout the interview, the coach evokes preparatory change talk by differentially responding to parent/teacher talk such that the advantages of adopting the principles and disadvantages of existing practices that are not consistent with these principles are amplified, and further elaboration from the parent/teacher is encouraged. During the interview, the coach should carefully monitor the working alliance, while supporting the parent/teacher's control, autonomy, and choice to freely consider change and make decisions consistent with their values and goals. Consistent with a motivational interviewing approach, the coach should focus on responding to the teacher with more reflections than questions, using simple and complex reflections to affirm values, emphasizing autonomy, and accepting viewpoints- even if different from their own. The coach should guide the conversation and resist asking close-ended questions and promoting the universal principles as "the answer." The interview procedures and tools associated with this step are also designed to help the coach cultivate importance and enhance parent/teacher confidence that they can make changes in their behavior consistent with these principles.

The Observation of the Universal Principles consists of two different observational formats, one for parents and one for teachers. In the home, the

Observation of the Universal Principles consists of a video-recorded parent-student interaction, which is then reviewed with the parent from a strengths based perspective, and as a means of reflection. In the classroom, the Observation of Universal Principles are assessed, including quantitative coding of principles 3 (reinforce the display of expectation) and 4 (minimize attention for minor inappropriate behaviors) as well as qualitative coding of observations related to the other three universal principles.

There are no concrete rules of thumb to signifying an appropriate time to transition to Step 3, and in some situations, this may never happen. Nevertheless, when it does parent and teacher ratings of importance and confidence should be considered, but should not be the only indicators used to make this decision. Additional readiness signs include decreased resistance, resolve to change, increased preparatory (and possibly mobilizing) change talk, questions about change, envisioning/brainstorming change, experimenting with change, as well as direct requests to get on with implementation. These readiness signs indicate that the parent or teacher have identified their own strengths and can easily acknowledge the advantages of implementing the universal principles. This step concludes with the coach negotiating a time to provide performance feedback.

Step 3. Share Performance Feedback. The Debriefing Interview provides structure for the delivery of performance feedback, as well as to encourage the parent and teacher to reflect on their current practices in light of the universal

principles and to increase mobilizing change talk- an indication that they believe implementing the principles is important and reflects their confidence that they are able to do so is high. At the end of the interview, parents and teachers are given the option of ending the consultative relationship or receiving Extended Consultation, Education, and Support, which involves a replication of Steps 2 and 3 within the context of specific goals for improvement. The coach's focus in the Debriefing Interview is dependent upon the parent and teacher's implementation of the universal principles during Step 2, as well as their motivation to change teaching/parenting practices.

Step 4. Offer Extended Consultation, Education, and Support. During this (optional) step of the process, the coach repeats steps 2 (Assess Current Practices) and 3 (Share Performance Feedback) with a parent/teacher-established goal articulated. While providing extended support, the coach may deem it appropriate to take an educational stance by more freely offering advice and teaching skills through discussion, modeling, and role-playing. Additionally, the coach can pre-correct for implementation problems by exploring barriers to implementation.

Step 5. Closure. Whether the coach is successful in increasing motivation to implement one or more universal principles better than is currently the case, the interview should end on a positive note, with coaches focusing on strengths and affirming commitment to their values. The process is also concluded by helping

parents access community resources that may be useful to remove barriers to school success.

APPENDIX B

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Appendix C

TFS Instruments
Coaches Checklist (Implementation and Adherence Levels)

Tertiary First Step Coach Checklist

Coach's Name: _____ Teacher's Name: _____ Child's Name: _____

TERTIARY HOMEBASE

For each step below indicate (a) the number of visits required to complete the step, (b) whether the step was completed, and (c) the tools used.

Visits ☐ **Engage in Values Discovery**

	Completed Yes	Completed No
Complete Ecological Assessment and Values Discovery	○	○

Date: ____/____/_____ *Tools used:* ○ Values Discovery cards

Visits ☐ **Assess Current Practices**

	Completed Yes	Completed No
Complete Universal Principles Interview	○	○
Complete Observation of the Universal Principles	○	○

Tools used: ○ Universal Principles Parent Overview ○ Self-Assessment ○ Video

Date: ____/____/_____

Visits ☐ **Share Performance Feedback**

Completed Yes ○ No ○

Tools used: ○ Universal Principles Parent Overview ○ Self-Assessment ○ Parent Tip Sheets ○ Review of Parent Observation Video ○ CLASS progress monitoring chart

Date: ____/____/_____

Visits ☐ **Offer Extended Consultation, Education & Support**

	Completed Yes	Completed No
Negotiate structure and content of change plan	○	○
Re-assess current practices	○	○
Provide additional performance feedback	○	○
Individualized homeBase curriculum	○	○

Date: ____/____/_____

Visits ☐ **Provide Closure**

Completed Yes ○ No ○

Date: ____/____/_____

Did you provide the family with any of the following? (Mark all that apply)

○ Community referral/resources? ○ Recommendations for respite care?
○ Recommendations for recreational activities? ○ Other: _____

Appendix D

MITI (Motivational Interviewing Treatment Integrity) - MI quality

38834

First Step to Success

ENHANCED FIRST STEP FIDELITY (MI Quality)*

Tape ID: ☐☐☐☐☐ Rater ID: ☐☐ Today's Date: ☐☐ (Month) / ☐☐ (Day) / 20☐☐ (Year)

For Office Use Only — Student ID: ☐☐☐☐ Coach ID: ☐☐ Wave: ☐ Cohort: ☐

PT topic: O Communication O Problem-Solving O Appropriate Behavior O Cooperation/Compliance O NA

Type: O FCU O CCU O PT

Location of visit:_____ For Office Use Only ☐☐

Duration of audio recording: ☐☐☐ Min Duration of fidelity session: ☐☐☐ Min Reliability: O Yes

INSTRUCTIONS: The following five questions pertain to global aspects of the Motivational Interviewing techniques used by the coach during his/her interactions with the family. For each domain select the description that best characterizes the coach's application of the MI technique with the family.

		Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
COLLABORATION	Fostered and encouraged power sharing during the interaction in such a way that client's ideas substantially influence the nature of the session.	O 1	O 2	O 3	O 4	O 5
CONTROL, AUTONOMY AND CHOICE	Promoted client control, autonomy and choice allowing the client to freely consider change and make decisions consistent with their values, goals, and ideals.	O 1	O 2	O 3	O 4	O 5
DIRECT CLIENT LANGUAGE	Directed client's language toward change encouraging client's commitment to change in the targeted behavior. Differentially responds to change versus resistance talk.	O 1	O 2	O 3	O 4	O 5
UNDERSTAND AND REFLECT	Demonstrated understanding of client point of view through complex reflections and accurate summaries so that the client senses he/she is understood.	O 1	O 2	O 3	O 4	O 5
EVOCATION	Proactively evoked client's own reasons for change and ideas about how change should happen (e.g, uses client values to encourage envisioning alternatives to current behaviors and situations.)	O 1	O 2	O 3	O 4	O 5

* Adapted from the MITI, version 3.0 (Moyers, T.B., Martin, T., Manuel, J.K., & Miller, W.R., 2007).

Child ID	Global Spirit Composite	Reflections: Questions Ratio	Percent Open Questions	Percent Complex
1198	5.00	1.33	.22	.58
1198	4.40	1.50	.33	.78
1203	4.80	.85	.54	.55
1203	4.80	1.10	.60	.73
1236	4.60	.60	.40	.44
1236	3.60	.84	.63	.56
1249	3.80	1.75	.25	.57
1249	3.20	.95	.58	.39
1249	4.80	.87	.73	.54
1262	4.80	2.50	.50-	.80
1262	3.80	5.00	.50	.90
1262	4.40	3.25	1.00	.92
1272	3.80	1.00	.20	.80
1292	4.60	2.00	1.00	.88
1323	5.00	1.15	.15	.50
1323	4.40	1.00	.55	.82
1352	3.40	.45	.45	.23
1352	3.40	.65	.70	.54
1352	3.20	3.50	.75	.71
1357	4.00	3.50	.50	.46
M Rating (SD)	4.20(.53)	1.86(1.13)	.63(.23)	.72(.15)

Case Level MI Implementation Integrity (Quality)

The MITI was used to assess implementation quality.

[redacted] [redacted]

38834

MITI (HASH TOTALS)	
MITI ITEMS	**MITI HASH**
Closed ended questions (CEQ)	
Open ended questions (OEQ: Beginning counseling = 1 OEQ for every CEQ; Advanced = 2 OEQ for every CEQ)	
Simple reflections (repeat or paraphrase)	
Complex reflections (extend meaning; Beginners less than 40% are complex; Advanced >= 50%)	
MI adherent (e.g., affirmations, asking permission; emphasize self determination/control; support)	
MI non-adherent (e.g., unsolicited advice, education or confrontation)	
Information	
TOTAL DARNROC HASH TOTALS	

Sum tallies from above and enter below:

MITI (HASH TOTALS)	
MITI ITEMS	**MITI HASH**
Closed ended questions (CEQ)	
Open ended questions (OEQ: Beginning counseling = 1 OEQ for every CEQ; Advanced = 2 OEQ for every CEQ)	
Simple reflections (repeat or paraphrase)*	
Complex reflections (extend meaning; Beginners less than 40% are complex; Advanced >= 50%)	
MI adherent (e.g., affirmations, asking permission; emphasize self determination/control; support)	
MI non-adherent (e.g., unsolicited advice, education, or confrontation)	
Information	
TOTAL DARNROC HASH TOTALS	

1	1	5	3

[redacted] [redacted]

Appendix (E)

Parent Satisfaction (Social Validity)

6918

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
7. ~~The coach was easy to approach.~~	○	○	○	○	○
8. ~~The coach didn't seem to be doing the right~~ things.	○	○	○	○	○
9. ~~The coach didn't seem to understand.~~	○	○	○	○	○
10. ~~The coach didn't talk about the right problems.~~	○	○	○	○	○
11. ~~I am satisfied with the suggestions and ideas the coach gave me.~~	○	○	○	○	○
12. The coach and I worked together to improve my child's behavior.	○	○	○	○	○
13. My child didn't like the coach.	○	○	○	○	○
14. I didn't like the coach.	○	○	○	○	○
15. The coach didn't seem to be helping.	○	○	○	○	○
16. The coach followed through with commitments and responsibilities.	○	○	○	○	○
17. The time I spent working with the coach was helpful.	○	○	○	○	○
18. Overall, the coach wanted to understand and improve my child's behavior.	○	○	○	○	○

INSTRUCTIONS: Please rate your satisfaction with the Enhanced First Step to Success program by filling in the appropriate circle for each question.

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1. The goals of the program were clearly explained to me.	○	○	○	○	○
2. It was clear what was expected of me during the program.	○	○	○	○	○
3. The program was easy to use.	○	○	○	○	○
4. The program did not take much of my time.	○	○	○	○	○
5. I enjoyed doing the activities with my child.	○	○	○	○	○
6. I am satisfied with the change in behavior with my child.	○	○	○	○	○
7. I noticed changes in my child's behavior.	○	○	○	○	○

1071

6918

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
8. The program was effective in teaching my child appropriate behaviors.	○	○	○	○	○
9. The program had a positive effect on the rest of my family.	○	○	○	○	○
10. I liked getting daily feedback from the Green/Red card.	○	○	○	○	○
11. I received on-going support/help from the Enhanced First Step Coach.	○	○	○	○	○
12. I would recommend the program to other parents.	○	○	○	○	○

Do you have any comments, feedback, or recommendations?

Appendix (F)

39580

	Not True (as far as you know)	Somewhat or Sometimes True	Very True or Often True
29. Thinks about sex too much	0	1	2
30. Threatens people	0	1	2
31. Smokes, chews, or sniffs tobacco	0	1	2
32. Truancy, skips school	0	1	2
33. Unusually loud	0	1	2
34. Uses drugs for nonmedical purposes (**don't** include alcohol or tobacco (describe): _____ _____	0	1	2
35. Vandalism	0	1	2

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For the following questions think about parenting as a ladder that you climb from the lowest, least experienced, or least competent rung to the highest, most experienced, or most competent rung. This ladder has 7 levels from 0 = Low to 6 = High. For each question, fill in the bubble that best describes you.

	Low						High
1. Your knowledge of how children grow and develop?	0	1	2	3	4	5	6
2. Your confidence that you know what is right for your child?	0	1	2	3	4	5	6
3. Your confidence in your ability to handle the day-to-day challenges of raising your child?	0	1	2	3	4	5	6
4. Your confidence in your ability to discipline your child?	0	1	2	3	4	5	6
5. Your ability to help your child learn?	0	1	2	3	4	5	6
6. Your ability to cope with the stress in your life?	0	1	2	3	4	5	6

For the following questions please fill in the response that best represents your opinion. While you may not find a response that exactly states your feelings, please fill in the response that comes closest to describing how you feel.

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. I often have the feeling that I cannot handle things very well.					
2. I find myself giving up more of my life to meet this child's need than I ever expected.					
3. I feel trapped by my responsibilities as a parent.					
4. Since having this child I have been unable to do new and different things.					
5. Since having this child I feel that I am almost never able to do things that I like to do.					

39580

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
6. I am unhappy with the last purchase of clothing I made for myself.	O	O	O	O	O
7. There are quite a few things that bother me about my life.	O	O	O	O	O
8. Having a child has caused more problems than I expected in my relationship with my spouse/partner.	O	O	O	O	O
9. I feel alone and without friends.	O	O	O	O	O
10. When I go to a party I usually expect not to enjoy myself.	O	O	O	O	O
11. I am not as interested in people as I used to be.	O	O	O	O	O
12. I don't enjoy things I used to.	O	O	O	O	O

INSTRUCTIONS: Please answer the next ten questions about yourself. Over the last two weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	O	O	O	O
2. Feeling down, depressed, or hopeless	O	O	O	O
3. Trouble falling or staying asleep, or sleeping too much	O	O	O	O
4. Feeling tired or having little energy	O	O	O	O
5. Poor appetite or overeating	O	O	O	O
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down	O	O	O	O
7. Trouble concentrating on things, such as reading the newspaper or watching television	O	O	O	O
8. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	O	O	O	O
9. Thoughts that you would be better off dead, or of hurting yourself in some way	O	O	O	O

10. If you checked off *any* problems, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?	O Not difficult at all O Somewhat difficult O Very difficult O Extremely difficult

CURRICULUM VITAE

Charlos V. Thompson
E-mail: charlos.thompson@kysu.edu

Education

Doctoral Candidate — May 2013
Co-Joint PhD Program University of Louisville / University of Kentucky

Master of Social Work, MSSW, — May 1994
University of Louisville, Louisville, KY

Bachelor of Arts in Sociology, BS, — May 1991
University of Louisville, Louisville, KY

Honors

Title I Community Advocate of the Year

Community Service Leader Award

Whitney M. Young Scholar

University of Louisville SGA Vice President

University of Louisville Campus Advance for Christ President

Southern Regional Education Board Doctoral Scholars Fellowship

Professional Associations

National Association of Social Workers

Council of Social Work Education

EMDRIA (International Association of Eye Movement Desensitization

Reprocessing International Association)

West Louisville Coalition Association

(CCC) Kentucky Community Collaboration for Children

Employment History

Assistant Professor Kentucky State University	2013-2014
Adjunct Faculty – University of Louisville	2010-2013
Clinical Social Worker and Supervisor – Family and Children's Place	2001-2009.
Mental Health Consultant for Louisville's JCPS Head Start Program	2005-2009.
Director of Youth Service Center / Family Resource Center Program	
Jefferson County Public Schools	1994-2001
Director of Youth Toward Excellence Center - University of Louisville	1991-1993
Iraqi-era military service (123rd U.S. Air National Guard)	1984-1994

Certifications

Kentucky Licensed Clinical Social Worker

EMDRIA – Eye Movement Desensitization and Reprocessing International Association

Publications

Reinke, W.M., Frey, A.J., Herman, K.C., and Thompson, C.V. (2013). Improving engagement and implementation of interventions for children with emotional and behavioral disorders in home and school settings. In H.M. Walker, & F.M. Gresham ((Eds.), *Handbook of Evidenced-Based Practices-Emotional and Behavioral Disorders (Applications in Schools).* (pp.432-445). NY: Guilford Press.

Sterrett, E., Thompson, C.,(In review). Parental motivation: a review of parameters that enhances adherence and attendance.

Moore, S., Robinson, M., Thompson, C., Dailey, A., (In review). Child sexual abuse amongst religious institutions: a prevention model.

Cloud, R., N., Frey, A., Lee, J., Lyle, P., Thompson, C. (2011). (unpublished manuscript). Use of educational and memory sciences to improve motivational interviewing learning outcomes: A case example of curriculum development. Richart, D., Miller, D., &

Thompson, C. (1991). Kentucky Kids Count Annual Publication. Annie E. Casey Foundation.

Teaching and Research

Assistant Professor	Social Work Field Placement Field Director	Fall 2013
Adjunct Faculty	Social Work Practice I	Fall 2012
Adjunct Faculty	Community Development and Organization	Fall 2012
Adjunct Faculty	Intro to Social Work	Fall 2011
Adjunct Faculty	Counseling Theories and Practice II	Fall 2011
	Data Collector	Fall 2011
Adjunct Faculty	Advance Practice 3	Spring 2011
	Research Coach and Data Collector	Spring 2010
Co-Investigator	IES Grant	Summer 2010
Co-Teach	Research Methods and Design	Spring 2010

Presentations and Trainings

Healthy Relationships for Couples. Statewide Quarterly Training: Community Coordination for Children Louisville, KY 2009.

Family Play Therapy. Louisville, KY 2008.

HIV/AIDS Overview for Healthcare Professionals, Louisville, KY 2008.

Critical Incident Stress Management Training, Louisville, KY 2007.

Multifaceted, Cognitive Behavioral Therapy Approach to Trauma and PTSD, Louisville, KY 2007.

Alcohol and Other Drug Training for Teenagers, Family and Children's Place, Louisville, KY 2006.

Mental Health: A Life in the Community for All, Louisville, KY 2006.

Substance Abuse Subtle Screening Inventory, Louisville, KY 2005.

Techniques for Working with Children with Emotional and Behavioral Problems, Louisville, KY 2005.

Promising Practices for School-Based Gang Prevention and Intervention, Louisville, KY 2003.

Louisville Adolescent Substance Abuse Treatment, Louisville, KY 2003.

Service

GECC-Graduate Education Curriculum Committee	Spring 2011 – Fall 2012
Graduate School Ambassador	Fall 2011 – Spring 2012
Community Collaboration for Children	2006-2009

MSSW Practicum Supervisor 1996-2009

Research Interests

School Social Work

Community Development in Urban Settings

Collaborative Mental Health Interventions

Mental Health Practice with Military Families